ENVIRONMENTAL ASSESSMENT

FOR THE

East Kentucky Power Cooperative, Inc. Special Use Permit

STE4062 Amendment

McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project

Daniel Boone National Forest, Stearns Ranger District
McCreary and Whitley Counties, Kentucky

Project Contained in the Rural Utilities Service 2020 – 2022
Transmission Construction Work Plan
KENTUCKY 59 FAYETTE

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ACRONYMS

AOI	Area of Influence
APE	Area of Potential Effect
BAE	Biological Assessment and Evaluation
BMPs	Best Management Practices
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CRA	Cultural Resource Analysts, Inc.
CWA	Clean Water Act
DBH	Diameter at Breast Height
DBNF	Daniel Boone National Forest
EA	Environmental Assessment
EKPC	East Kentucky Power Cooperative, Inc.
E.O.	Executive Order
ESA	Endangered Species Act of 1973, as amended
et seq.	*et sequential* (and following)
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act, as amended
HUC	Hydrologic Unit Code
HUD	Housing and Urban Development
ID	Interdisciplinary
KAR	Kentucky Administrative Regulations
KAZC	Kentucky Airport Zoning Commission
KDAQ	Kentucky Division for Air Quality
KDFWR	Kentucky Department of Fish and Wildlife Resources
KDOW	Kentucky Division of Water
KGS	Kentucky Geological Survey
KHC	Kentucky Heritage Council
KPDES	Kentucky Pollutant Discharge Elimination System
KU	Kentucky Utilities
kV	Kilovolt
KYTC	Kentucky Transportation Cabinet
LIDAR	Light Detection and Ranging
NEPA	National Environmental Policy Act of 1969, as amended
NFIP	National Flood Insurance Program
NFS	National Forest System
NHPA	National Historic Preservation Act of 1966, as amended
NRHP	National Register of Historic Places
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
NWP	Nationwide Permit
OHWM	Ordinary High Water Mark
OKNP	Office of Kentucky Nature Preserves

OSHA	Occupational Safety and Health Administration
PPE	Personal Protection Equipment
RD	Rural Development
ROD	Record of Decision
ROW	Right-Of-Way
RUS	USDA Rural Utilities Service
§	Section
SHPO	State Historic Preservation Office
SRD	Stearns Ranger District
SWPPP	Stormwater Pollution Prevention Plan
U.S.	United States
USACE	U.S. Army Corps of Engineers
USEPA	U. S. Environmental Protection Agency
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WNS	White Nose Syndrome
WSS	Web Soil Survey
WWW	World Wide Web

Environmental Assessment
McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project
Daniel Boone National Forest, Stearns Ranger District
McCreary and Whitley Counties, Kentucky

1.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

East Kentucky Power Cooperative, Inc. (EKPC) of Winchester, Kentucky, is a non-profit electric generation and transmission cooperative that provides electric power to 16 Owner-Member Electric Distribution Cooperatives. The distribution cooperatives serve approximately 530,000 homes, farms, and commercial and industrial customers in 87 Kentucky counties located across the central and eastern portions of the Commonwealth. The McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section (McCreary County – Wofford) is roughly 20.7 miles in length, and was one of EKPCs first transmission lines, constructed circa 1952. Due to reliability concerns associated with the deteriorating physical condition of the existing facility, EKPC has identified the need to rebuild this line section as the most cost effective long-term solution.

EKPC is requesting approval from the U.S. Department of Agriculture (USDA), Forest Service (USFS) and the USDA Rural Utilities Service (RUS) to rebuild and maintain a 69 kilovolt (kV) electric transmission line within the existing 100-foot wide right-of-way (ROW) in portions of McCreary and Whitley Counties, Kentucky. The proposed project would involve National Forest System (NFS) lands that are under the management and stewardship of the USFS as part of the Daniel Boone National Forest (DBNF), Stearns Ranger District (SRD), as well as private land. EKPC is requesting an amendment of *Special Use Permit No. 4062* from the USFS to rebuild and maintain the section of transmission line located on NFS lands. EKPC also plans to request financing assistance from RUS for the proposed project.

Prior to issuing the Special Use Permit Amendment for the proposed project on NFS Lands, the USFS must complete an environmental analysis and prepare an Environmental Assessment (EA) in accordance with the *Notice, Comment and Appeal Procedures for NFS Projects and Activities* (36 CFR Part 215), and the Forest Service Handbook 1909.15 – *National Environmental Policy Act Handbook*. RUS must also complete an environmental analysis in accordance with Rural Development's (RD) *Environmental Policy and Procedures* for implementing the National Environmental Policy Act (7 CFR Part 1970) prior to approving the financing assistance for the proposed project. The USFS will be acting as the lead agency in the preparation of the EA and RUS will be the cooperating agency. Correspondence between USFS and RUS coordinating agency status is included in Exhibit D – *Agency Correspondence*, Pg. 143.

On behalf of the USFS and RUS, EKPC Natural Resources and Environmental Communications, has conducted an environmental investigation and analysis, and prepared reports that can be adopted by the USFS and RUS as an EA to meet their respective environmental regulations for complying with the *National Environmental Policy Act (NEPA).* The EA will serve as a detailed

written record of the environmental analysis completed for the proposed project and will be used to determine whether preparation of an Environmental Impact Statement is necessary.

The EA incorporates a detailed description of the proposed project, including topographic maps and aerial photographs depicting the location of the project and a discussion of the need and alternatives considered for the proposed action. A discussion of the affected environment within the proposed project area, the environmental impacts of the proposed action, and mitigation of environmental impacts are included to support this EA.

1.1 Other Federal Statutes and Executive Orders

The following is a listing of federal statutes and E.O.s that may be applicable to the proposed action:

- Archeological Resources Protection Act, 16 U.S.C. 370aa *et seq.*
- Clean Air Act, 42 U.S.C. 7401 *et seq.*
- Clean Water Act, 33 U.S.C. 1251 *et seq.*
- Comprehensive Environmental Response, Compensation, & Liability Act, 42 U.S.C. 9601 *et seq.*
- Endangered Species Act, 16 U.S.C. 1531 *et seq.*
- Farmland Protection Policy Act, 7 U.S.C. 4201 *et seq.*
- National Environmental Policy Act, 42 U.S.C. 4321 *et seq.*
- National Forest Management Act of October 21, 1976 (P.L. 94-579, 90 Statute 2743, as amended; 43 USC 1701 et seq.);
- National Historic Preservation Act, 16 U.S.C. 470 *et seq.*
- Native American Graves Protection and Repatriation Act of November 16, 1990 (P.L. 101-601, 104 Statute 3048; 25 USC 3001-3013);
- Resource Conservation & Recovery Act, 42 U.S.C. 6901 *et seq.*
- Solid Waste Disposal Act, 42 U.S.C. 3251
- Safe Drinking Water Act, 42 U.S.C. 300 *et seq.*
- E.O. 11514, Protection and Enhancement of Environmental Quality
- E.O. 11593, Protection and Enhancement of the Cultural Environment
- E.O. 11988, Floodplain Management
- E.O. 11990, Protection of Wetlands
- E.O. 12898, Environmental Justice
- E.O. 13084, Consultation and Coordination with American Indian Tribes
- E.O. 13112, Invasive Species
- E.O. 13212, Actions to Expedite Energy Related Projects
- Title 36 Code of Federal Regulations, Part 251, Subpart B

1.2 Required Permits

The following is a list of known permits that would be required for implementation of the proposed action:

- U.S. Forest Service
  - Amendment of *Special Use Permit No. 4062*
- U.S. Army Corps of Engineers
  - Nationwide Permit 12
- Kentucky Division of Water
  - General Water Quality Certification – Nationwide Permit 12
  - Permit to Construct Across or Along a Stream (Floodplain General Permit);
  - Kentucky Pollutant Discharge Elimination System General Permit (KYR10) Stormwater

1.3 Federal Decisions to be Made

EKPC is requesting an amendment of *Special Use Permit No. 4062* from the USFS for the proposed reconstruction and maintenance of an electric transmission line on NFS lands associated with within the SRD of the DBNF in portions of McCreary and Whitley Counties, Kentucky. EKPC also plans to request financing assistance from RUS for the proposed project on these public lands, as well as private lands. The federal actions related to EKPC's proposed electric transmission line project would be USFS's decision, based on the environmental analysis outlined in the EA, to implement the proposed action and issue the amended *Special Use Permit No. 4062* for the proposed action. RUS's decision of whether or not to grant the requested financing assistance would be made based on the environmental analysis outlined in the EA and subsequent engineering and financial reviews.

The USFS's decision to be made based on the environmental analysis outlined in the EA would be whether to implement the proposed action and issue the amended *Special Use Permit No. 4062* for the proposed action on NFS lands within the DBNF, or implement one of the alternatives investigated for the proposed action. The need for the USFS to move forward with this project rests ultimately with the *Land and Resource Management Plan for the Daniel Boone National Forest* (page 2-15) which states: GOAL 7 - Provide a sustainable mix of desired uses, valued characteristics, and services to improve the long-term benefit to local communities and the public. The authority and direction concerning special use authorizations and administration is found in Federal law, the *Forest Service Manual*, and *Forest Service* Handbook, see Section 1.4: *Agency Purpose and Need* for further detail.

RUS's decision of whether or not to grant the requested financing assistance would be made based on the environmental analysis outlined in the EA and subsequent engineering and financial reviews. Issuance of this EA is not a decision on a loan application and therefore not an approval of the expenditure of federal funds. Issuance of the EA and any subsequent environmental findings is required in accordance with NEPA and RD's *Environmental Policies and Procedures* (7 CFR Part 1970). Legal challenges to the EA and any subsequent environmental findings may be filed in federal district court under the Administrative Procedures Act.

1.4 Agency Purpose and Need

As discussed in Section 1.3: *Federal Decisions to be Made*, the need for the USFS to move forward with this project rests ultimately with the *Land and Resource Management Plan for the Daniel Boone National Forest* (page 2-15) which states: GOAL 7 - Provide a sustainable mix of desired uses, valued characteristics, and services to improve the long-term benefit to local communities and the public. The authority and direction concerning special use authorizations and administration is found in Federal law, the *Forest Service Manual*, and *Forest Service Handbook* as follows:

- Title V, Federal Land Policy and Management Act of October 21, 1976 (43U.S.C. 1761-1771) that covers the generation, transmission, and distribution of electrical energy (Land and Resource Management Plan for the DBNF, Appendix B, page B-5);
- Forest Service Manual 2700 - SPECIAL USES MANAGEMENT CHAPTER 2700 - ZERO CODE, 2703 POLICY - 2703.3 Authorization of Use - *Authorize the use of NFS lands under the proper statutory or regulatory authority with terms and conditions which protect the resource values and the interests of the Federal Government*; and
- Forest Service Handbook 2709.11 - Special Uses Handbook Chapter 10 - Application and Authorization Processing, page 71.

RUS is authorized to make loans and loan guarantees to finance the construction of electric distribution, transmission, and generation facilities, including system improvements and replacements required to furnish and improve electric service to rural areas, as well as demand side management, energy conservation programs, and on-grid and off-grid renewable energy systems. RUS does not regulate the siting of transmission and generation infrastructure. RUS' proposed federal action is to decide whether to provide financing assistance for the proposed project. Completing the NEPA process is one requirement, along with other technical and financial considerations, in processing a financial assistance application.

The Rural Electrification Act of 1936, as amended (7 USC §901 et seq.), generally authorizes the Secretary of Agriculture to make rural electrification and telecommunication loans, including specifying eligible borrowers, references, purposes, terms and conditions, and security requirements. RUS' agency reviews include the following:

- Provide engineering reviews of the purpose and need, engineering feasibility, and cost of the proposed project;
- Ensure that the proposed project meets the borrower's requirements and prudent utility practices;
- Evaluate the financial ability of the borrower to repay its potential financial obligations to RUS;
- Review and study the alternatives to mitigate and improve electric reliability issues;
- Ensure that adequate transmission service and capacity are available to meet the proposed project's needs; and
- Ensure that NEPA and other environmental requirements and RUS environmental policies and procedures are satisfied prior to making a financing decision.

1.5 Applicant Purpose and Need

EKPC is proposing the McCreary County – Wofford transmission line rebuild project to improve system reliability by improving the physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The EKPC Reliability team assessed the McCreary County – Wofford line section through a two-phase evaluation process to determine if the line section is in need of replacement due to poor physical condition. First, the mechanical integrity of the in-service phase and static wires were assessed using an automated robot. The robot was placed directly on the line, traveling the length of the conductor for the entire span. While traveling along the line, the robot uses an electric field and magnets to determine the remaining strength of the wire. The electric field is used to measure the remaining cross-sectional area of the steel core, while the magnetic field detects rust, pitting, and broken strands. The second phase of the assessment process was an evaluation of the data and scoring based on specific parameters, which resulted in the EKPC Reliability Team determination that the existing McCreary County – Wofford 69 kV transmission line section warranted replacement. The outage probability of this line section is expected to be considerably higher than for other lines on the EKPC system.

Based on the identified need to address reliability concerns associated with the poor physical condition of the existing transmission line section, EKPC Design and Maintenance staff performed an analysis to identify the most cost effective, long-term solution to address the identified system issues. For this transmission line section, the potential for continued reliability issues was considered high due to the poor physical condition of the existing conductor. EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor (795 ACSR/TW) currently utilized by EKPC. Therefore, a complete rebuild of the McCreary County – Wofford transmission line section using steel pole structures was determined to be the most cost effective long-term solution. Rebuilding this line section with larger conductor will not only improve the physical condition of the line, it would also provide increased conductor thermal rating, increased voltage support for normal and contingency conditions, address reliability concerns, and reduce conductor losses. Rebuilding this line section will also ensure the facility is brought up to date and is compliant with current federal National Electric Safety Code. Furthermore, the new steel poles would not be flammable, which would provide additional benefits when the USFS conducts cyclical prescribe burning and would not need to ensure the existing wooden poles are pretreated prior to burns. These additional benefits would ultimately result in future cost savings for EKPC's Owner-Members and the USFS.

Not rebuilding this aging line section could have an adverse effect on the health and safety of the public living in the area that the transmission line facility serves. Interruptions in electric service caused by not rebuilding the line section could impact the operation of emergency lighting, medical life support equipment, and healthcare operations, possibly resulting in injury or death. Service interruptions caused by outages on this line section could also cause ill effects, such as pneumonia, to individuals living in the project area, or potentially death in the event of an extended power outage during periods of freezing weather. The public could also be affected in times of severe heat during episodes of electric power brownouts and outages. Very small children, the elderly, and individuals sensitive to heat could suffer the most should outages occur during periods of extreme heat. Furthermore, a failure of the energized line could result in fires or electrocutions.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1. Proposed Action

EKPC proposes to reconstruct, operate, and maintain the McCreary County Junction – KU Wofford (McCreary County – Wofford) 69 kV Transmission Line Project within the existing 100-foot wide ROW, in south-central Whitley and McCreary Counties, Kentucky (see enclosed *Project Overview Map*). In total, the existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 and connecting the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The proposed project lies in the Cumberland River drainage and would be located on the Whitley City, Hollyhill, Cumberland Falls, and Wofford U.S. Geological Survey 7.5 minute topographic quadrangles (see enclosed *Project Topo Maps 1 – 4 & NFS Lands Topo Maps 1 – 3*).

The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4 mile west of KY Hwy 26 in Whitley County. From the Whitley City substation, the route of the existing electric transmission line heads east for approximately 4.2 miles just past Indian Knob, then turns east northeast for approximately 8.2 miles to just south of the Cumberland River. The existing transmission line then turns more easterly for approximately 1.2 miles and then resumes in a northeast direction, crossing the Cumberland River, for approximately 3.3 miles. At this point, the existing transmission line turns southeast for approximately 1.5 miles where it crosses Interstate 75 to the EKPC Goldbug Substation. From the Goldbug substation the line turns to the southeast for 2.3 miles and crosses KY Hwy 26 prior to terminating at the KU Wofford Substation on the north side of KY Hwy 779 (Browns Creek Road). See enclosed *Project Aerial Maps 1 – 6 & NFS Lands Aerial Maps 1 – 5*.

2.1.1 Project Components

In total, the proposed McCreary County – Wofford transmission line rebuild project would be approximately 20.7 miles in length and occur within the existing 100-foot wide right-of-way (ROW) easement, which encompasses approximately 250.9 acres. The existing transmission line is located in McCreary and Whitley Counties and roughly parallels KY Hwy 478, between Whitley City and Wofford, Kentucky. The route of the existing transmission line to be rebuilt crosses approximately 12.1 miles of private land, encompassing approximately 146.7 acres, and approximately 8.6 miles of NFS land associated with the SRD of the DBNF, encompassing approximately 104.2 acres (See Table 1). Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/ construction of some access roads. Roughly 16.6 miles of access roads, which would be approximately 15 feet in width, would be improved or constructed for the construction and maintenance of the transmission line. These access roads would cross approximately 5.6 miles of private land, involving approximately 11.7 acres, and approximately 11.0 miles of NFS land, involving approximately 20.0 acres. Details regarding the involved USFS tracts and access road information are included in Exhibit A – *USFS Tract/Access Road Information*, Pg. 76.

Table 1. Lands in the McCreary County– Wofford Transmission Line Rebuild Project Area

	TRANSMISSION LINE		***ACCESS ROADS***	
Land Status	**Miles***	**Acres***	**Miles***	**Acres***
Private	12.1	146.7	5.6	11.7
NFS Lands	8.6	104.2	11.0	20.0
Total	**20.7**	**250.9**	**16.6**	**31.7**

*Acreage calculated based on GIS length measurements and 100-ft wide ROW/15-ft wide road estimates

The access road lengths and acreages represented above are subject to change based upon actual surveys and conditions, negotiations with landowners, future environmental investigations, and adjustments to the road alignments in response to the results of those investigations.

The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide ROW easement. Based on the engineering design, 151 steel-pole structures (50 of which would be located on NFS land) with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures (76 of which are located on NFS land) that have an approximate above ground height of 60 feet and a typical span length of 550 feet. One segment of the existing line (approximately 1,250 feet in length), located on private property between structures six and eight would be relocated up to 160 feet to the north, to increase the distance from private residences recently built in close proximity (see enclosed *Project Aerial Map 1 of 6*). Three electrical conductors supported by the steel-pole structures would transmit electric power along the rebuilt transmission line. Most of these new support structures would be steel single-pole and two-pole H-frame type structures with a few three-pole structures required based on engineering design constraints. Two static wires would be located extending along the top of the support structures to protect the electric conductors from lightning strikes.

2.1.2 Project Schedule

The start of construction for the proposed project depends on the time required to obtain multiple permits and approvals for the various project components. Construction of the proposed electric transmission line rebuild project is tentatively scheduled to begin in the spring of 2021 and be completed by December 2022. Based on the preliminary schedule, it is expected that construction would occur seasonally to avoid typically unfavorable weather conditions in the winter months, and this would also allow for the line to be put back into service for the duration of peak loading conditions during extreme winter weather events.

2.1.3 Construction Procedures

The first phase of construction for the proposed line rebuild project would involve the access roads to be used for ingress to the existing ROW easement. Access to the ROW would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. Due to the rugged topography and limited access in the western portion of the project area it is expected that many of the existing access points (i.e. circa 1952 construction access roads) will need to be improved to allow for the larger construction vehicles to reach the project area. The amount of work required to improve/construct these access roads will depend on the local

topography and the current condition of the existing roads. Improvements would range from utilizing existing roads in their current condition, reopening (i.e. brush clearing, widening, etc.) existing roadways, to limited creation of new access roads, see representative Photos 8 – 10. EKPC estimates that fifty percent of the proposed access roads (length and/or width) would require new ground disturbance, which would result in roughly 15.9 acres of disturbance within the 16.6 miles of proposed access roads for the project.

EKPC conducted field verification of existing road conditions and estimates that the following 11.0 miles of new access road/existing access road improvements on NFS land will be required to access the project area. Additional details are included on the enclosed NFS Lands mapping and Access Road Information table:

- ~1.5 Miles New Access Road Construction
- ~1.7 Miles Existing Access Road – Minimal vegetation clearing required
- ~7.8 Miles Existing Access Road – Widening and/or vegetation clearing required

The access roads would be improved/constructed with the assistance of heavy equipment, such as a bulldozer or skidder. Erosion would be controlled along the new access roads by applying lime, fertilizer, USFS approved seed mix for road reclamation, and mulch to exposed soil areas. Water bars and dips would also be installed in the roads along with silt fences and staked straw bales to aid in preventing erosion. Gravel or crushed stone would be applied to road surfaces, as needed, to prevent rutting. The total length of access roads that would be improved/constructed on NFS land would be approximately 11.0 miles (20.0 acres). These access roads would be constructed or improved in accordance with design standards outlined in the USFS's *Land and Resource Management Plan for the Daniel Boone National Forest, 2004* (*Forest Plan*) and would be approved by the USFS. Once construction of the proposed transmission line is completed, the new access roads on NFS land would be closed to the public by means of keyed gates placed at the entrance of the roads to block public access and to allow for the future maintenance of the line or otherwise blocked (i.e. bermed or obliterated) to prevent access. On private land the new access roads would be closed or left open according to the direction of the landowners involved. EKPC has identified the proposed access roads on the enclosed mapping and details are included on the enclosed Access Road Information sheet. EKPC anticipates using these roads to access the ROW easement, then driving over the existing terrain within the ROW to access the new structure locations.

The second phase of project activities associated with reconstructing the transmission line will occur as the existing wood-pole structures are removed and the new steel-pole structures are installed. For structure locations within flat or gently sloping topography no ground disturbing activities are typically required for site preparation; however, some minimal disturbance may occur if the site becomes wet during and after precipitation events. For structures located on steep or uneven terrain, grading may be used to create a level pad adjacent to the structure to allow vehicles and other equipment to operate safely. Existing wood-pole structures would be removed by accessing the locations with a utility boom truck and pulling the poles directly out of the ground and then backfilling the hole with minimal ground disturbance required. During new steel-pole structure installation, a hole will be mechanically excavated using a truck mounted auger and the new structure placed into the hole. The excavated soil will then be backfilled in the hole, mounded around the base of the installed structure, or disseminated in an adjacent vegetated area. Based on

previous project experience, EKPC estimates that structure installation activities could create up to 0.08 acre (roughly 50' X 70') of soil disturbance within areas of steeper terrain where a level construction pad is required for safe operations, although the majority of the structure installations will require significantly less disturbance. EKPC estimates an average of 0.04 acre of disturbance at each of the 151 proposed structure locations, which would result in just over six acres of disturbance along the 20.7-mile-long project area. To the maximum extent practicable EKPC plans to first set the new structures and then use the existing conductor to pull the new conductor into place, which would generally avoid the need to operate equipment between structure locations.

Within the existing ROW, the vegetation is maintained by EKPC and local residential/ agricultural practices as low growing herbaceous plant communities and no tree clearing will be required. However, EKPC project engineers utilized Light Detection and Ranging (LIDAR) data to analyze the project area, in order to identify trees located along the edges of the existing transmission line that could pose a potential threat to the future operation of the transmission line. These trees are typically larger, live trees that have grown up along the edges and/or encroached upon of the ROW over the past 68 years. As part of this project, EKPC would field verify and clear approximately 73.7 acres to reestablish the 100-foot-wide ROW, see enclosed *Bat Habitat Maps 1 – 9*. This tree clearing would also include LIDAR identified hazard trees that due to their height and/or position relative to the new line could fall and come into contact with the energized conductor. Ultimately, the final determination of which tree(s) may require clearing will be made following construction of the new line by observing tree height(s) relative to that of the new line.

On NFS land merchantable trees cut from the proposed electric transmission line ROW and associated new access roads would be purchased from the USFS by EKPC. The merchantable trees may be resold by EKPC. Equipment such as a high line cable truck or a skidder may be used to move the cut trees to loading sites. Trees and brush on NFS land may also be disposed of, left where they fall, windrowed, mulched or scattered, as agreed with the USFS. On private land the merchantable trees may be cut into commercial lengths and piled along the ROW for the landowner to utilize or sell. Trees may also be disposed of, left where they fall, windrowed, chipped or scattered depending on the requests of the landowners.

Appropriate soil erosion and sedimentation control procedures would be implemented during and after the construction of the proposed transmission line in areas denuded of vegetation in accordance with the *Soil and Water Protection Measures for Timber Sales* (Cotton et. al. 2020), and, as necessary, the utilization of berms, construction entrances, silt fences, etc. Resource management activities that may affect soil and/or water quality must follow applicable Kentucky Rules and Regulations per the requirements of the *Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10)* as a minimum to achieve soil and water quality objectives. On NFS land these measures would meet the standards outlined in the USFS's *Forest Plan* that are designed for the protection of soil and water resources. When *Forest Plan* standards exceed Kentucky BMPs or water quality standards, *Forest Plan* standards shall take place. Required land clearing activities would not be initiated until absolutely necessary and all disturbed areas would be stabilized and revegetated, as soon as practicable, following construction to reduce the amount of time bare soils are exposed to wind and water erosion.

EKPC is committed to minimizing water quality degradation of streams within the project area or other downstream waterbodies due to stormwater discharges from construction related activities by implementing enhanced BMPs within the critical areas of these streams. Critical areas have been identified by the Kentucky Division of Water (KDOW) as those areas within 50 feet of waters designated as Outstanding State Resource Waters, and on a positive slope toward the water of the Commonwealth. Because the project area crosses the receiving waters, some activities may be required within the critical areas of these waters. Any required disturbances in critical areas will be controlled using adequately protective alternative devices including, but not limited to, covering with turf mats/erosion control blankets, mulch, or straw, stabilization with tackifiers or by track treading within 24 hours or "as soon as practicable" after completion of disturbance activities. Methods of cover, stabilization, and sediment control in critical areas will be determined on a case by case basis by the construction contractor, EKPC project inspector, or another qualified person. Unless infeasible, natural buffers will be provided and maintained around these receiving waters, stormwater will be directed to vegetated areas, and infiltration of stormwater will be maximized to reduce pollutant discharges.

2.1.4 Maintenance Procedures

Once constructed, the new transmission line would be aerially inspected three times a year and would be ground inspected once every four years by walking the ROW. The minimum electrical clearances maintained from the transmission line conductors and the ground surface within the ROW would be 24 feet.

2.1.4.1 Routine Cyclical Herbicide Treatment

Woody-stemmed vegetation would be maintained/controlled within the ROW through the use of low-volume, selective herbicide treatment every three to five years, depending on the rate of vegetation growth. Selective herbicide treatment would be performed manually using a foliar application method during the months of May through October. The selective manual foliar method of application utilizes herbicide spray that is applied directly onto the leaves of target vegetation during the growing season when the plants are in full leaf, and not to desired species. The herbicide spray would be delivered by walking the ROW using low volume backpack sprayers fitted with large droplet hose end nozzles. The low volume backpack sprayers may be replenished by nurse vehicles composed of larger volume tanks carried by all-terrain vehicles or small all-wheel drive trucks.

On NFS lands, the herbicide would be applied in accordance with label instructions and USDA approved procedures as stipulated by the standards outlined in the *Forest Plan*. In areas where herbicide use is prohibited (i.e. sensitive habitats) the vegetation would be cut either by mechanical or manual methods. Vegetation may also be cut in order to bring it back to the size where it can be effectively treated with herbicides should an area be missed during the maintenance cycle or should excessive vegetation growth take place between the maintenance cycles. In addition, during the maintenance cycles any brush and woody-stemmed vegetation growing within the gated access roads used for the construction of the transmission line would be selectively treated with one of the proposed herbicides using a manual foliar application, or cut from the roadbeds. Dead or living trees outside the transmission line ROW that could fall within five feet of a point underneath the outside conductor (hazard tree) would also be cut to protect the line from outages caused by falling trees and branches during severe weather events.

2.1.4.2 Herbicides

The Non-Restricted Use Herbicides, listed by their active ingredients, which are being proposed to aid in controlling vegetation growth on the proposed electric transmission line ROW include Aminopyralid, Imazapyr, and Triclopyr. These chemicals are approved for use as stipulated through labeling requirements by the U.S. Environmental Protection Agency (USEPA). Different formulations of the technical acids of each chemical are created to facilitate the ease of use and increase the efficacy of these products. These proposed herbicides currently have USFS risk assessments completed (*Aminopyralid, Imazapyr, and Triclopyr – Human Health and Ecological Risk Assessment – FINAL REPORTs by Patrick R. Durkin, Syracuse Environmental Research Associates, Inc.*), and these assessments have been relied upon in lieu of a project-specific risk assessment. However, if herbicides are developed in the future that may be more suitable, (for example if they are more selective, are safer, allow the use of a lower quantity, are less expensive, are more effective for specific species), then they will be analyzed and may be added to the plan through a Supplemental Information Review (SIR) if they are determined to have the same or lesser effects.

The proposed chemical mixture of the herbicide would be water based with a soybean oil surfactant added to aid the herbicide in adhering to the plant foliage. The rate of herbicide application would be the lowest effective rate approved by USFS to meet the proposed objective. The maximum application rate for the proposed chemicals would be ten gallons of herbicide mix per acre and the proposed formulation rates are as follows:

The following herbicide rate formulation would be used:

- 7 ounces Aminopyralid (Milestone – 2 lbs. a.e./gal)
- ¼ percent Imazapyr AC (Arsenal AC – 4 lbs. a.e./gal)
- 3 percent Triclopyr 3A (Garlon 3A – 3 lbs. a.e./gal; amine formulation)
- ½ percent Enhance (Surfactant derived from soybean oil)

Products would be mixed in 100 gallons of water with a total solution volume of 104 gallons.

Table 2. McCreary County – Wofford Transmission Line Herbicide Use Prescription

Prescription	**Routine Cyclical Treatment**
Number of Treatments:	Periodic while under permit
Approximate Timing:	Approximately every 3 to 5 years
Approximate NFS land to treat:	104.2 acres
Approximate private land to treat:	146.7 acres
Treatment Method:	Manual directed foliar
Time of Year:	May - October
Solution Mixture per 100 gallon, Total Solution of 104 Gallons	
Aminopyralid, oz. [% mixture]	7 [0.05]
Imazapyr AC, oz. [% mixture]	32 [0.25]
Triclopyr 3A, oz. [% mixture]	384 [3.0]
Enhance (surfactant), oz. [% mixture]	64 [0.5]
Application (Gallons of mixture/acre)	8 – 10

Applicable *Forestwide Standards* as outlined in the *Forest Plan* would be followed for the handling and application of the proposed herbicides on NFS lands. The standards that would be implemented include: a restriction of herbicide mixing, loading or cleaning areas in the field within 200 feet of open water, wells or other sensitive areas; weather conditions would be monitored prior to and during herbicide applications, and such applications would be suspended if temperature, humidity and wind conditions become unfavorable as defined by the above-mentioned document; a restriction of a soil-active herbicide application within 60 feet of any known listed or proposed endangered or threatened plant species; a restriction of herbicide applications within 30 horizontal feet of lakes, wetlands, perennial or intermittent springs and streams; hose end sprayers would use large droplet nozzles and be applied with low volume backpacks; and signs noticing the herbicide applications would be placed near areas of public use on NFS lands, such as, roads, and hiking trails. On private lands within the project area, maintenance activities would include USEPA approved herbicides applied at USEPA approved rates and application methods by licensed applicators.

2.1.5 Conservation Measures

During construction activities, EKPC would utilize accepted erosion control measures and maintain a Stormwater Pollutant Prevention Plan (SWPPP) employing accepted Best Management Practices (BMPs) for construction activities as required by the Kentucky Division of Water (KDOW). On NFS land these measures would meet the standards outlined in the *Forest Plan* that are designed for the protection of soil and water resources. When *Forest Plan* standards exceed Kentucky BMPs or water quality standards, *Forest Plan* standards shall take precedence. Also, required land clearing activities would not be initiated until absolutely necessary and all disturbed areas would be stabilized and revegetated, as soon as practicable, once construction is complete, to reduce the amount of time bare soils are exposed to wind and water erosion. Furthermore, applicable *Forest Plan* standards would be followed and are discussed further in the resource sections analyzed below.

2.2 Alternatives

There were no significant issues raised during the scoping process; therefore, the identified range of project alternatives have not changed. These alternatives are described below and they include the *Proposed Action* – Rebuild, Operate, and Maintain Electrical Transmission Line, and *Alternative B* – Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicides on NFS Lands.

2.2.1 Alternative A – Proposed Action – Rebuild, Operate, and Maintain Electrical Transmission Line

Alternative A (Proposed Action) consists of the USFS amending *Special Use Permit No. 4062* to EKPC for the purpose of rebuilding, operating, and maintaining the McCreary County – Wofford Transmission Line (as outlined in Section 2.1: *Proposed Action*). RUS would also provide the financing assistance for the electric transmission line rebuild project as part of the Proposed Action.

2.2.2 Alternative B – Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on NFS Lands

Alternative B consists of the USFS amending *Special Use Permit No. 4062* to EKPC for the purpose of rebuilding, operating, and maintaining the McCreary County – Wofford Transmission Line on NFS Lands (as outlined in Section 2.1: *Proposed Action*); however, the use of herbicides to maintain the ROW would not be allowed on NFS land. The ROW would continue to be maintained through manual and mechanical cutting techniques, as currently permitted. Maintenance of the new ROW through manual and mechanical cutting techniques would occur every three to five years, depending on the rate of vegetation growth, to prevent woody stemmed vegetation from growing into the electrical conductors. This alternative addresses issues of concern regarding the use of herbicides on NFS lands. RUS would also provide the financing assistance for the electric transmission line project as part of Alternative B.

Table 3. Summary of Alternatives – Activities and Treatment Methods

Alternative	Transmission Reconstructed	ROW Maintained by Cutting on NFS lands	ROW Maintained by Herbicides on NFS lands
Proposed	Yes	Yes	Yes
B	Yes	Yes	No

2.3. Alternatives considered but dismissed from detailed analysis

Based on the identified project purpose and need, EKPC is proposing to rebuild the 20.7-mile long McCreary County – Wofford transmission line to improve system reliability by improving the physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Because the proposed project would be located completely within the existing 100-foot-wide ROW easement, any alternatives to the current route could potentially affect a larger area, cost more to construct, affect more property owners, and have greater environmental impacts. Therefore, the proposed route was the only alternative considered in detail for the McCreary County – Wofford transmission line rebuild project. One segment of the existing line (approximately 1,250 feet in length), located on private property between structures six and eight would be relocated up to 160 feet to the north, to increase the distance from private residences recently built in close proximity (see enclosed *Project Aerial Map 1 of 6*).

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

Within the region of southern Kentucky where the proposed project would be located, actions typically relevant in evaluating cumulative effects are those relating to private residential/ agricultural activities, trail maintenance, timber harvest, wildfire/prescribed burning, oil and gas, and utility development. This region of Kentucky is remote and predominantly comprised of NFS Lands and there has been little, to no, private development in the western portion of the project area. Private residences and farm buildings are interspersed throughout the area, and are more common in the eastern portion of the project area on private lands, but no large commercial or industrial facilities are present. EKPC has attempted to identify activities that have occurred, are occurring, or are reasonably foreseeable within the proposed project area that would be relevant in the analysis of cumulative effects for the proposed action.

Other activities and projects considered past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are:

- Private residential/agricultural activities
- Past and future logging/timber harvest
- Road and trail maintenance and improvement projects
- Utility and right-of-way maintenance
- Oil and gas and utility development

Wildfires and USFS cyclical prescribed burning were assessed as other potential past, present, or reasonably foreseeable activities that could result in cumulative effects when considered in combination with the proposed action. However, it was determined that neither wildfire nor prescribed burning would have the potential to result in cumulative effects because no fire use or similar activity is proposed as part of the proposed transmission line rebuild project. Therefore, wildfires and USFS cyclical prescribed burning will not be considered further in this assessment, as there is no potential for cumulative effects to occur from these activities.

EKPC is currently unaware of any other significant activities that are reasonably foreseeable within the proposed project area that may be relevant in the assessment of cumulative effects. It is anticipated that any potential cumulative effects that could result from implementation of the Proposed Action or Alternative B would likely be insignificant, as these alternatives would result in the open lands associated with the existing transmission line ROW continuing to be operated and maintained as an electrical transmission facility.

Potential project impacts were evaluated through an assessment of the extent and quality of on-site resources and the potential environmental consequences that could occur to these resources as a result of the proposed McCreary County – Wofford transmission line project. The evaluation includes environmental issues identified under NEPA and those environmental factors singled out for special attention under other applicable Federal laws, statutes, and E.O.s. Each resource is discussed further in the sections below.

3.1 Land Use & Recreation

3.1.1 Introduction

This section describes the affected environment and environmental consequences as they apply to land use and recreation. The area of influence for land use and recreation was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). See *Project Topographic and Aerial Maps* included in Exhibit B – *Project Maps*, Pg. 79. This buffer was considered a reasonable area that would encompass all identified land uses and public lands in the vicinity. However, no impacts to land use and recreation are anticipated beyond the project footprint of the proposed action.

3.1.2 Affected Environment

All land to be impacted by the proposed transmission line reconstruction project is located within the project footprint. The center of the project footprint consists of an existing 100-foot wide transmission line ROW easement that has been in place since circa 1952. At either end of the project, the existing EKPC Whitley City and KU Wofford 69 kV distribution substations have also been in place since circa 1952.

The predominant land uses within the 1,500-foot corridor are forest, agriculture, and shrub/brush rangeland, although the outskirts of the cities of Whitley City, Goldbug, and Wofford are overlapped by the project's area of influence. This western portion of the project area is located within a region of Kentucky that is extremely remote and predominantly comprised of NFS Lands and there has been little, to no, private development. Private residences and farm buildings are interspersed throughout the area, and are more common in the eastern portion of the project area on private lands, but no large commercial or industrial facilities are present. Public and institutional facilities with grounds within the area of influence include Somerset Community College McCreary Center, Piney Grove Church, Whitley Central Intermediate School, Whitley County Central Primary School, and Whitley County High School. Major public highways in the vicinity of the project are limited to US 27 at the western terminus and Interstate-75 and US 25W near the eastern terminus.

The western section of the proposed project crosses through approximately 8.6 miles of NFS land associated with the SRD of the DBNF, encompassing approximately 104.2 acres. One recreational facility within the area of influence is the Laurel Creek Trail, a 4.25-mile trail that runs adjacent to Laurel Creek from County Road 696 (Pigskin Road) to KY 478 (USFS Viewer 2020, USFS Trail). The Cumberland River is crossed by the transmission line and overlapped by the area of influence and is used for recreational boating and fishing. The third recreational facility within the area of influence is the Ballard Ford Memorial River Access which provides access to the Cumberland River at the shoals of Ballard Ford. This ramp is located in Whitley County approximately one mile west of Interstate-75 at Exit 15/Goldbug exit (White 2020, Whitley Co Tourism). No other recreational facilities, such as campgrounds or picnic areas, exist within the area of influence.

3.1.3 Environmental Consequences

The direct and indirect effects of the proposed action on land use and recreation would be anticipated to be within the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)
The proposed project location is contained within an existing transmission line ROW easement that has been in place since circa 1952. The reconstruction and vegetation clearing activities will be limited to the existing 100-foot wide ROW easement, with the exception of some nearby hazard trees discussed below. As a result, the proposed transmission line reconstruction would not have any additional impacts on existing land uses and the land surrounding the proposal will still be used for its current purposes. In addition, significant portions of the existing transmission line route traverse agricultural lands and EKPC has a policy of allowing agricultural practices within its ROW easements as long as they do not interfere with, or jeopardize, the operation of its lines.

As discussed in Section 2.1.4: *Construction Procedures*, LIDAR data will be used to analyze the project area, in order to identify hazard trees that due to their height and/or position relative to the new line could fall and come into contact with the energized conductor. As part of this project, EKPC would field verify and clear approximately 73.7 acres to reestablish the 100-foot-wide ROW and remove hazard trees. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. The access roads following construction or improvement would be approximately 15 feet in width, and predominantly be located outside of the existing ROW, affecting 31.7 acres.

The proposed transmission line reconstruction and associated access roads would not change the overall land use, forest types, or stand conditions within the wooded portions of the project area and, as a result, fragmentation of the forested lands within the area would not be a concern. Forest fragmentation is any process that serves to disrupt, convert, or isolate habitat. In a forest context, fragmentation can occur across a range of landscape patterns (USFS 2004). It occurs when the land use of a block of forested land is changed in such a manner that one section of the forest becomes isolated from the other (i.e., establishment of a strip coalmine or construction of a shopping center). The proposed project would maintain the ROW in a similar manner to its current composition, with the clearing of some hazard trees and trees that have encroached upon of the ROW for a total of approximately 73.7 acres cleared. The proposed activities would not result in isolating sections of the forest. Vegetation in the ROW would ultimately consist of shrubs, grasses, and forbs, which would not present a barrier to wildlife species, and wildlife could traverse or move about within the ROW. Once construction of the proposed transmission line is completed, the new access roads on NFS land would be closed to the public by means of keyed gates placed at the entrance of the roads to block public access and to allow for the future maintenance of the line or otherwise blocked (e.g. bermed) to prevent access. On private land the new access roads would be closed, reclaimed, or left open according to the direction of the landowners involved. With either case the roads should not present a barrier to wildlife species.

As described in Section 3.1.2: *Affected Environment*, developed recreational facilities within the project area of influence are limited to the Laurel Creek Trail and Ballard Ford Memorial River Access to the Cumberland River. The Laurel Creek Trail runs parallel to Laurel Creek where it flows through a gorge in the western portion of the proposed project, and the trail is crossed by the existing transmission line five times. The proposed reconstruction activities will be limited to the

high ground far above Laurel Creek and little to no vegetation clearing is expected in the vicinity of the creek and trail due to their location far below the electric line. At the Cumberland River and the Ballard Ford Memorial River Access, construction activities will also occur far above the river and changes to vegetation cover will be minimal. Therefore, no direct impacts are expected to these recreational resources as a result of the proposed project.

Incidental hiking, and deer and small game hunting activities could occur within the project area and could be affected by the proposed project. Hunting would probably be improved by additional early successional vegetation. Gathering of berries and herbs would be slightly impacted by the three to five-year maintenance cycle using herbicides. This effect would be temporary and it would be likely that between cycles berry picking would improve. The use of herbicides to maintain the proposed ROW could also potentially affect incidental recreational activities through the placement of signs restricting access after an application. However, the herbicides would be applied infrequently (once every three to five years) and the restriction would only be temporary immediately following an application. Additionally, due to the rural nature of the project area only a limited number of people, if any, would be affected. The use of herbicides to maintain the proposed ROW would not have any effect on the existing land use within the project area. Because the proposed project would not significantly impact traffic, noise, visual resources, or air quality, as discussed in the respective sections below, there are no significant indirect effects anticipated to public lands or recreational resources as a result of the proposal.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
As described above, the use of herbicides as outlined in the proposal to maintain the proposed electric transmission line ROW would not have any effect on the existing land use or recreation in the project area. Therefore, Alternative B, the proposed action without the use of herbicides on NFS lands, would have the same effects on the existing land use in the project area as Proposed Action, discussed above.

3.1.4 Cumulative Effects

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action or Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to existing land use and recreation. It is believed that recreational opportunities (i.e. hiking, hunting, fishing, boating, etc.) within the 1,500-foot area of influence have been minimally impacted by the other projects identified as potentially contributing to cumulative effects (private residential/agricultural activities, ROW and trail maintenance, timber harvest, oil and gas and utility development, etc.). The area still provides for these opportunities to the public on public lands, and the private landowners can continue to participate in these activities on their property as well. Land use in the project area appears consistent with that seen in the region, as outlined above. The proposed action is contained within or is immediately adjacent to (in the case of hazard trees) the existing 100-foot wide ROW easement already operated by EKPC, and would have negligible impacts to the existing land use and recreational activities that may occur in the

area of influence. Therefore, it is unlikely that any minimal, localized incremental effects of the proposed action on land use would interact with the effects of other actions in the area to produce cumulatively significant effects on land use and recreational opportunities.

3.2 Geology and Soils

3.2.1 Introduction

This section describes the affected environment and environmental consequences as they apply to geological and soil resources. For the proposed project, any potential impacts associated with geology and soils are anticipated to be localized within the area where ground disturbing activities would occur. Significant ground disturbing activities are only anticipated within the existing 100-foot wide ROW and access roads, and only vegetation management activities (including hazard tree removal) not requiring significant ground disturbance are anticipated in the outer portion of the project footprint. Therefore, the area of influence for geology and soils was considered to be the project footprint: a 150-foot-wide corridor encompassing 75 feet on either side of the existing centerline and the access roads. Any potential impacts associated with geology and soils are anticipated to be localized within the identified project footprint.

3.2.2 Affected Environment

Based on previous project experience, EKPC estimates that structure installation activities could create up to 0.08 acre (roughly 50’ X 70’) of soil disturbance within areas of steeper terrain where a level construction pad is required for safe operations. Although the majority of the structure installations are located on flat, to moderately flat topography and will require significantly less disturbance. EKPC estimates an average of 0.04 acre of disturbance at each of the 151 proposed structure locations, which would result in just over six acres of disturbance along the 20.7-mile-long project area. There would also be ground disturbing activities required to level/widen construction access roads in the project area. Total access road impact acreage is estimated to be 31.7 acres, although EKPC estimates that only fifty percent of the proposed access roads (length and/or width) would require new ground disturbance, which would result in roughly 15.9 acres of disturbance within the 16.6 miles of proposed access roads for the project. Due to the minimal ground disturbance associated with the proposed 20.7-mile-long project area and its location within an existing utility easement with existing poles and associated infrastructure, no detailed field explorations have been performed for the project footprint. However, a general description of the corridor is presented below.

3.2.2.1 Geology

The area of McCreary County and Whitley County containing the proposed project is underlain by sedimentary rocks that slope downward gently toward the southeast, due to uplift by the Cincinnati Arch formation to the northwest. Rocks of Mississippian age are limited to limestone of the Bangor formation and calcareous shale of the Pennington Formation that occur on lower slopes of mountains along the Little South Fork, South Fork Cumberland River, and the main western tributaries. The remainder of the area is dominated by Younger Pennsylvanian rocks of the Lee and Breathitt formations, which occur as alternating layers of sandstone and shale (Byrne et al. 1970).

3.2.2.2 Hydrogeology

According to published information, most wells drilled in the valley bottoms in the region of the project are adequate for a domestic supply. In McCreary County, most wells drilled on hillsides are adequate for a domestic supply and about half of the wells drilled on hilltops and ridges are adequate for domestic needs. Whitley County generally has lower groundwater availability, with fewer than half of the wells drilled on hillsides adequate for domestic supply, and wells on ridges yielding smaller quantities of water. In both counties, deep wells penetrating more than 500 feet of sandstone may yield enough water for small utilities or industrial supplies. Throughout Whitley County and most of McCreary County, most springs yield less than 5 gallons per minute (Carey et al. 2006a and Carey et al. 2006b).

The Kentucky Groundwater Data Repository, accessed through the Kentucky Geologic Map Information Service, was reviewed including active, inactive, and decommissioned wells and springs in the vicinity of the project. No springs were identified within the vicinity of the project footprint, but several wells are present in the vicinity and include both domestic wells and wells classified as an "other" type. Domestic water sources, such as wells and spring boxes, have not been field identified at the time of this writing due to posted lands and inaccessibility; however, these sources would be identified prior to the initiation of construction and/or maintenance activities (KGS 2020).

3.2.2.3 Karst

The term "karst" refers to a landscape characterized by the presence of caves, springs, sinkholes, and losing streams, created as groundwater dissolves soluble rock such as limestone or dolomite. These areas are of special interest in evaluation of potential for geologic impacts because the underground features can easily be impacted by surface disturbance. No detailed field explorations have been performed for the project footprint. Published mapping provided by the Kentucky Geology Survey for the state of Kentucky classifies the entire project footprint as "non-karst" and no sinkholes are mapped within or in the vicinity of the footprint (KGS 2020). In addition, no sinkholes or karst features were observed by project personnel during the field investigations of the project area.

3.2.2.4 Soils

The Federal Farmland Protection Policy Act (FPPA), enacted by Congress in 1984, established criteria for identifying and considering the effects of federal actions on the conversion of farmland to nonagricultural uses. The purpose of the FPPA is to minimize the extent of farmland conversion and impacts and to "assure that federal programs are administered in a manner that, to the extent practicable, would be compatible with state, unit of local government, and private programs and policies to protect farmland." The Natural Resource Conservation Service (NRCS) administers the FPPA program and has developed the online Web Soil Survey (WSS), which is used to assess impacts when farmland is converted to other uses.

The NRCS Resource Soil Scientist for the region of Kentucky where the project is located, Ms. Perri Pedley, was contacted via email on May 7, 2019 to determine if any of the soils within the project area are classified as prime farmland or hydric. In a letter dated April 18, 2017, Ms. Pedley stated that based on the information provided by EKPC, no conversion of

agricultural lands (prime, unique, or farmland of local or statewide importance) will occur or be negatively impacted by the proposed undertaking. Ms. Pedley stated that this is due to the fact that the project is located within previous easements and/or ground that is too steeply sloped to be important farmland. Therefore, the NRCS office has no additional concerns at this time. No custom soils report was provided by NRCS.

The correspondence provided by Ms. Pedley did not address hydric soils in the proposed project area. Therefore, EKPC used the NRCS online Web Soil Survey (WSS) at *http://websoilsurvey.nrcs.usda.gov/app/* to review the hydric soils data. Eight soil types within the project footprint meet the criteria for hydric soils. Mapping from the WSS indicates these areas are predominantly associated with the floodplains of larger streams in the project area. According to the WSS data, these eight soils occupy 71.4 acres within the project footprint, which represents ~15% of the total area. Several wetland areas were identified during field surveys of the project footprint; however, due to avoidance and minimization measures that would be implemented during construction no loss of wetlands are anticipated as a result of the project. Wetlands are further discussed in Section 3.4.2.2: *Wetlands*. The NRCS correspondence and WSS Hydric Soils data is included in Exhibit D – *Agency Correspondence*, Pg. 143.

According to the WSS, the predominant soil series identified in the project footprint are the Shelocta-Highsplint-Sequoia complex (11F), Wernock-Sequoia complex (3D), and the Shelocta-Sequoia complex (22E). These complexes range from 12 to 80 percent slopes and the steeper units are characterized as rocky. The majority of the soils located within the project area have a severe to very severe erosion hazard rating, although some soils with slight to moderate erosion hazard ratings are present, mainly in the valleys of the larger streams.

3.2.3 Environmental Consequences

The direct and indirect effects of the proposed action on geology and soils are anticipated to be restricted to the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The direct and indirect effects of the proposed action on soils would be anticipated to be within the project footprint. As described above, the main components of the construction phase of the project are construction/improvement of access roads, removal of the existing wood-pole structures, and installation of the new steel-pole structures. Proposed maintenance activities include a one-time clearing of woody vegetation within the existing ROW along with hazard trees adjacent to the existing ROW (totaling approximately 73.7 acres). In subsequent years, routine vegetation control with herbicide would be conducted on a three to five-year cycle. Minor localized impacts to soils are anticipated to occur near the surface where the construction and clearing activities occur. There are no components of the proposed project that would impact deeply buried subsurface features.

3.2.3.1 Geology

Whether preserved or not, areas with unique geologic features are considered areas of geologic importance. In the western portion of the project, Laurel Creek flows through a

scenic gorge that contains the USFS-maintained Laurel Creek Trail. Although the geology of the gorge provides scenic views and some uncommon microhabitats, similar gorges are present along many streams in the region. Laurel Creek is currently spanned by the existing transmission line at five locations and would continue to be spanned by the proposed line between new structures AY-18 and AY-25 (see enclosed Laurel Creek Crossing Map). For structures AY-18, AY-21, and AY-25 the new steel-pole structure would replace two existing wood-pole structures and be located further from the stream than current structure locations, with the remaining structures replaced at the current structure locations. At each of these crossings, the stream is located within an approximately 50-75 foot deep gorge with vertical, to near vertical, sandstone cliffs located on at least one side of the stream. Due to this topography, vehicular access to the structure location is not feasible by traveling within the existing ROW; therefore, access roads would be required to reach each structure location. Four existing access roads would be improved for access to the north, from the DBNF gated Appletree Road. Four existing access roads would be improved and two new access points created to the south from the existing Meadow Grove County Road. In addition, the topography precludes the need for EKPC to maintain vegetation within the majority of the Laurel Creek stream crossings due to the minimum necessary electrical clearances met by virtue of the elevation difference between the ridgetops and valley bottom. While hazard tree clearing would be required on the adjacent ridgetops, no vegetation clearing would occur within 100 feet of Laurel Creek. This would be the case for four of the Laurel Creek crossings, but is not applicable for the crossing between Structures AY-22 and AY-23, where the elevation change is not as dramatic and vegetation is maintained adjacent to the stream. Therefore, there are no unique areas of geological importance that would be negatively impacted within the proposal's area of influence.

As discussed in Section 2.1.4: *Construction Procedures*, some limited rock excavation may be required during construction when existing wood-pole structures are removed and the new steel-pole structures are installed. For structures located on steep or uneven terrain, grading may be used to create a level pad adjacent to the structure to allow vehicles and other equipment to operate safely. However, the ground disturbance is expected to be minimal in extent and the material disturbed will consist primarily of soil. Therefore, no areas of geological importance would be impacted by the proposed project.

3.2.3.2 Hydrogeology

Although some groundwater and water wells are present in the area of influence, due to the limited scope of the project no impacts to these resources are anticipated due to project construction. The project area is underlain mainly by interbedded layers of sandstone and shale, and inputs to groundwater come from precipitation and surface water that filters through the soil.

3.2.3.3 Karst

Given that the proposed project corridor is located primarily within interbedded sandstone and shale, and that none of the other geologic formations found beneath the corridor are described as having karst features such as sinkholes, the project corridor is not considered karst prone. In addition, significant karst features have not been observed within the project footprint. Therefore, impacts to karst features are not anticipated from the proposed project.

Should any karst features be identified that cannot be avoided, they would be treated on a case by case basis, with typical treatment of karst features consists of two primary alternatives – an inverted rock filter or a concrete plug.

3.2.3.4 Soils

The NRCS Soil Resource Scientist was contacted to acquire a list of the soil types located within the proposed project footprint. Although some farmland is present within the project footprint, the NRCS stated that they have no concerns related to prime farmland because no agricultural lands will be converted or negatively impacted by the proposed undertaking, and the project is located within previous easements and/or ground that is too steeply sloped to be important farmland. In addition, due to a reduction in the number of transmission line structures within the corridor, it is anticipated that the proposed facility rebuild project would ultimately have a slight beneficial effect on farmland. An analysis of WSS data for the project corridor determined that approximately 15% of the corridor consists of hydric soils, mainly along the floodplains of major streams. However, no impacts to hydric soils are anticipated as a result of the project. Wetlands are further discussed in Section 3.4.2.2: *Wetlands*.

As discussed in Section 2.1.3: *Construction Procedures* and Section 3.10: *Water Quality,* appropriate soil erosion and sedimentation control procedures would be implemented during and after the construction of the proposed transmission line in areas denuded of vegetation. On NFS land these measures would meet the standards outlined in the USFS's Forest Plan that are designed for the protection of soil and water resources. When Forest Plan standards exceed Kentucky BMPs or water quality standards, Forest Plan standards shall take place. Required land clearing activities also would not be initiated until absolutely necessary and all disturbed areas would be stabilized and revegetated, as soon as practicable, once construction is complete to reduce the amount of time bare soils are exposed to wind and water erosion. Because of these practices, no significant direct or indirect effects would be anticipated from the construction of the proposed project.

During the construction of the proposed electric transmission line, the soils within the proposed ROW could be affected by vehicles being driven on the ROW causing compaction and erosion of soils. The weight of the vehicles and associated machinery on the ground causes compaction of the soil. Soil compaction increases bulk density and decreases aeration porosity. This affects the soil's ability to store and supply air, water, and nutrients (USFS 1989). Due to the steepness of much of the terrain along the proposed ROW, soil compaction from vehicular passes and heavy equipment would not take place in many areas because of the absence of such equipment. Areas affected by the construction access roads and areas of sustained gentle slopes along the proposed ROW would experience some soil compaction due to the use of construction equipment.

Most of the soils in the proposed project footprint have a severe to very severe erosion hazard. To achieve electrical clearances during the reconstruction phase of the proposed transmission line, some vegetation along the edges of the ROW would be cut at a maximum height of four inches with only minor ground disturbance, leaving roots intact to aid in holding soils in place. Soils would only be exposed to wind and water erosion at support

structure locations within the proposed ROW to allow for the installation of the support structures. Typically, the maximum amount of land around each of the support structures that would be affected in areas of steeper terrain to create a level construction pad would be 0.08 acre; however, due to the project area containing significant areas of flat to rolling topography EKPC estimates an average of 0.04 acre of disturbance at each of the structure locations, which would result in just over six acres of disturbance along the 20.7-mile-long project area. The maximum amount of land that would actually be occupied by new steel-pole structures would be considerably less at 0.002 acre/structure, representing a total of approximately 0.3 acre within the entire ROW. Soils would also be exposed on portions of the construction access roads associated with the proposed transmission line construction.

Soil erosion on the proposed transmission line ROW during maintenance cycles would not be a problem because mechanical equipment would not be used to perform maintenance procedures. Maintenance of the proposed ROW would be accomplished manually using low volume backpack sprayers. The effects of manual methods on the soil are negligible because litter and duff are left intact, and revegetation is not suppressed (USFS 1989). Additionally, operations that minimize litter disturbance will minimize adverse effects on erosion and compaction (USFS 1997). EKPC would also restrict maintenance of the ROW to periods when the area is dry, to the maximum extent practicable.

The proposed use of herbicides on the electric transmission line ROW as outlined in EKPC's proposal would not have a direct effect on the soils of the project area because the herbicides would break down rapidly, would not cause erosion and would not be expected to affect soil productivity (USFS 1997). The herbicides are degraded relatively quickly in the soil and combined with the infrequency of application they would not buildup in the soil (USFS 1997). There also is general consensus that these chemicals do not significantly reduce the activity of the overall community of soil microorganisms when used on ROWs at normal forestry rates (USFS 1997). Depending on the application rates and soil environment, herbicides can stimulate or inhibit soil microorganisms, but adverse effects are only observed at concentrations well above those that occur on ROWs (USFS 1997). The proposed herbicides should not significantly reduce the activity of soil microorganisms, nor adversely affect them in such a way as to reduce site and soil productivity, when applied at the proposed typical application rates (USFS 1997).

Herbicides by themselves do not disturb the soil and cause erosion. It is the application method which can cause minor erosion problems, i.e., truck mounted spraying equipment driven on the ROWs. After the herbicide is applied and the plant dies, the plant material remains until it decomposes by natural means. The dead plant material does not use nutrients from the soil or block the sun from reaching the ground. The growth of new vegetation occurs with the increased availability of nutrients and the increased amount of sun reaching the soil. Meanwhile, the dead plant material leaves an organic layer, which mitigates raindrop impact, promotes infiltration, and serves as ground cover to prevent soil erosion (USFS 1997). Under the proposal, maintenance of the ROW involving herbicide applications would have minimal, if any, effects on the soils because mechanized spraying equipment would not be utilized, and the potential for compaction and erosion of soil associated with such equipment would be absent. Following the construction of the

proposed line, the maintenance program of the established ROW would involve manual selectively applied herbicide applications, which would not result in exposed soils, or the compaction or erosion of soils (USFS 1989).

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The construction of the proposed electric transmission line as described in Alternative B would not have any major changes regarding impact on soils, as compared to the Proposed Action, discussed above. However, the maintenance of the proposed ROW through the cutting of vegetation on NFS lands, absent the use of herbicides, could potentially have more of an effect on soils. The mechanical cutting/mowing of the vegetation on the ROW to control vegetation growth could potentially cause soil erosion through the tramping of vegetation and the compaction of soils. However, due to the steepness of the terrain in the project area only a small portion of the ROW would have sustained gentle slopes where mechanical equipment would be able to operate. Consequently, the majority of the ROW on NFS lands would be manually cut, leaving roots intact, which would reduce the potential for soil erosion. As a result, Alternative B would only have a slightly higher potential for causing soil erosion problems, as compared to the Proposed Action.

3.2.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted geology and soils within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact geology and soils.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the construction, operation, and maintenance of the proposed transmission line as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and future actions identified above would result in minimal cumulative effects on geology and soils. Due to the nature of the proposed project and the steepness of much of the terrain along the proposed ROW, effects to soils are expected to be extremely localized and restricted to the surface or just below the surface, with no impacts to deeply buried subsurface features. The only areas that would be affected are located along the access roads or within the ROW of the proposed project where sustained gentle slopes make the use of construction equipment practicable. The potential for cumulative effects to soils would be limited to areas where the proposed project will occur in the same location as the other projects identified as potentially contributing to cumulative effects (private residential/agricultural activities, ROW and trail maintenance, timber harvest, oil and gas and utility development, etc.). The extent of other activities within the corridor is extremely limited, therefore, the potential for cumulative effects is expected to be negligible.

Additionally, the proposed use of herbicides in the maintenance of the ROW would have no cumulative effects to the soils located on the proposed ROW since such chemicals would only be

infrequently applied to the vegetation on the ROW and would not build up in the soil (USFS 1997). Furthermore, as outlined in Section 3.2.3.4: *Soils*, no major erosion problems would be anticipated from the construction and maintenance of the proposed project; therefore, it is unlikely that the incremental effects of the proposed action would interact with the effects of other actions in the area to produce cumulatively significant effects on geology or soils. Due to the fact that the project is located within previous easements and will not convert or negatively impacts farmland, no cumulatively significant effects on prime and statewide important farmland soils are anticipated.

3.3 Floodplains

3.3.1 Introduction

The Federal Emergency Management Agency (FEMA), through the National Flood Insurance Program (NFIP), has primary responsibility for developing and implementing regulations and procedures to control development in areas subject to flooding. The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The Kentucky Division of Water (KDOW) is the state's coordinating agency for the NFIP. To implement the NFIP, FEMA prepares Flood Insurance Rate Maps (FIRMs) that show special flood hazard areas where flood insurance is mandatory. The 100-year flood, or base flood, is the flood having a one percent chance of being equaled or exceeded in any given year. The base flood is the national standard used by the NFIP and all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development.

The project footprint considered for floodplains was defined as the immediate area involved in the proposed action where disturbances associated with the reconstruction, operation, and maintenance of the McCreary – Wofford Transmission Line Project would be most likely to occur, including hazard tree removal. The project footprint would include a 150-foot wide corridor encompassing 75 feet on either side of the existing centerline and the access roads. Any potential impacts associated with floodplains are anticipated to be localized within the identified project footprint.

3.3.2 Affected Environment

The digital FIRM data for McCreary and Whitley Counties was acquired from the FEMA Map Service Center. This data was used to generate the *Floodplain Maps 1 – 5* that are included in Exhibit B – *Project Maps*, Pg. 79. The maps depict the project footprint crossing areas of 100-year floodplain associated with numerous streams including (from west to east) Bridge Fork, Laurel Creek, Wright Branch, Marsh Creek, Duck Run, Jellico Creek, the Cumberland River, Youngs Creek, Blake Fork, Watts Creek and Browns Creek. No alternate routes were considered to avoid crossing the identified floodplain areas because the intent of the project is to reconstruct the transmission line within the established ROW. None of the proposed permanent, gated maintenance access roads constructed on NFS Lands would impact any designated floodplain areas. On private lands in the eastern portion of the project area, approximately 0.6 mile of access roads would be required within the floodplain of the Cumberland River and 650 feet within the floodplain of Blake Fork. However, because the topography in these areas is flat, the access roads would consist of a drive path over the prevailing terrain without any cut or fill required, and for these reasons the project access roads are not included in the floodplain assessment.

At the majority of the crossings, the transmission line will be replaced over the floodplain, and no construction activities will take place within the floodplain. Based on the floodplain data, 24 steel-pole structures would be installed, replacing 33 existing wood-pole structures within the designated floodplains of the project area; specifically, Cumberland River (20 new structures replacing 27 existing structures), Blake Fork (2 new structures replacing 2 existing structures), Watts Creek (0 new structure replacing 1 existing structure), and Browns Creek (2 new structures replacing 3 existing structures). Following construction of the new transmission line, the existing line section supported by 33 structures will be removed, which will result in the net loss of nine structures from the designated floodplains within the project area. The diameter at ground level of the poles within the designated floodplains will be up to roughly 30 inches. It is also anticipated that the required number of guy wires and anchors will be consistent with the existing conditions.

Based on previous direction from the Kentucky Division of Water (KDOW), due to project activities occurring within designated floodplain, an application for Permit to Construct Across or Along a Stream was prepared and submitted to the KDOW – Floodplain Management Section. The KDOW application was submitted on September 10, 2019 and the *Stream Construction Permit for Construction In or Along a Stream* (Permit No. 29356P), was issued September 23, 2019, in accordance with KRS 151.250 and KRS 151.260. Correspondence between EKPC and KDOW and a copy of the permit is included in Exhibit D – *Agency Correspondence*, Pg. 143. In addition, the local floodplain coordinator, Stephen McKinney, was contacted via email on December 13, 2019 to inquire whether a local floodplain permit would be required for the project. Mr. McKinney responded via email on December 13, 2019 that no local permitting would be needed.

Subsequent to the issuance of this permit, the KDOW – Floodplain Management Section, effective July 1, 2020, issued a Floodplain Development General Permit (KY FPGP) for activities that have minimal potential to affect floodplains, including development and placement of utility poles. Thus, the proposed project shall have automatic coverage under the KY FPGP. On July 13, 2020 EKPC sent an email to Mr. Shawn Hokanson, KDOW Manager Water Resources Branch, requesting to terminate the Wofford 69 kV Transmission Line-Whitley Co Stream Construction Permit 2935P under AI 163467 due to stream construction activity for this project being eligible for coverage under the KY FPGD. Mr. Hokanson responded via email to confirm that permit 29356 was terminated effective July 13, 2020, and that the project qualifies for coverage under the new KY FPGP and construction must be completed according to the requirements of that permit.

3.3.3 Environmental Consequences

The direct and indirect effects of the proposed action on floodplains would be anticipated to be within the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

As described in Section 3.3.2: *Affected Environment*, the route for the electric transmission line traverses several floodplain areas associated with named perennial streams or rivers. There are no practicable alternatives to crossing the identified floodplain areas because the intent of the project is to reconstruct the transmission line within the established right-of-way. As discussed above, the proposal would be authorized by the KY FPGP due to the development and placement of utility

poles being identified by the KDOW – Floodplain Management Section, as an activity that has minimal potential to affect floodplains.

Project access roads would be installed in the floodplain area for the construction and maintenance of the proposed new line; however, the access roads would not have any effect on flood levels or flows. Within the designated floodplain areas, these roads would be established by driving over the existing flat terrain, which would not divert or displace floodwaters. Additionally, the proposed use of herbicides would have no effect on the floodplains. Therefore, due to a reduction in the number of transmission line structures within the floodplain and negligible effects from new access roads, it is anticipated that the proposed facility rebuild project would have minimal potential to affect floodplains. Additionally, the use of herbicides would have no effect on the base flood elevation.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
Alternative B would have similar effects on the identified floodplains as the Proposed Action discussed above. Like the Proposed Action, Alternative B would still involve the crossing of the floodplain, and would involve the same number of support structures located in the floodplain area and the same access roads, at the same locations.

3.3.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. Other actions identified through this assessment that would also likely occur within floodplains of the project area, include the USFS routine mechanical clearing of vegetation to prevent encroachment of native trees or Non-Native Invasive Plant Species (NNIPS) along the Laurel Creek Trail that runs adjacent to and is located within the designated floodplain of Laurel Creek. Laurel Creek is currently spanned by the existing transmission line at five locations and would continue to be spanned by the proposed line between new structures AY-18 and AY-25 (see enclosed Laurel Creek Crossing Map). At four of these crossings, the stream is located within an approximately 50-75 foot deep gorge with vertical, to near vertical, sandstone cliffs located on at least one side of the stream. The topography precludes the need for EKPC to maintain vegetation within these Laurel Creek stream crossings due to the minimum necessary electrical clearances met by virtue of the elevation difference between the ridgetops and valley bottom. This is not applicable for the crossing between Structures AY-22 and AY-23, where the elevation change is not as dramatic and vegetation would be maintained by EKPC adjacent to the stream, within the same area where vegetation is maintained by the USFS along Laurel Creek Trail. There were no other actions identified through this assessment that would reasonably be expected to impact the base flood elevation within the project area.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action or Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to floodplains. As outlined in Section 3.3.3, the proposed new transmission

line is not expected to affect floodplains in the project area. Likewise, the USFS vegetation management along the Laurel Creek Trail would be limited in size and due to the nature of the actions would also have minimal potential to impact floodplains. Therefore, because of the minimal potential for base flood elevation impacts of this other action when assessed in combination with the proposed transmission line reconstruction project, there would not be any measurable cumulative impacts to floodplains expected.

3.4 Jurisdictional Waters of the U.S.

3.4.1 Introduction

The jurisdictional authority for protection of waters of the U.S. is derived from several sources, including the Clean Water Act of 1972 (CWA). Section 404 of the CWA authorizes the USACE to issue permits for discharges of dredged or fill material into waters of the U.S., and it gives the USACE enforcement authority against violations. Section 10 of the Rivers and Harbors Act regulates activities affecting navigation that occur below the Ordinary High Water Mark (OHWM) elevation of navigable waters of the U.S. The determination of jurisdiction applies over the entire surface of a waterbody to the OHWM. E.O. 11990 directs federal agencies to take action to minimize the destruction, loss, or degradation to both non-jurisdictional and jurisdictional wetlands.

The area of influence for jurisdictional waters of the U.S. and non-jurisdictional waters/wetlands was considered to be the immediate area involved in the proposed action where disturbances associated with the reconstruction, operation, and maintenance of the McCreary – Wofford Transmission Line Project would be most likely to occur, including hazard tree removal. Therefore, the area of influence for waters/wetlands was considered to be the project footprint: a 150-foot-wide corridor encompassing 75 feet on either side of the existing centerline and the access roads. Any potential impacts associated with waters/wetlands are anticipated to be localized within this footprint.

The proposed transmission line structures were sited and designed to avoid placement of new structures in waters of the U.S.; therefore, EKPC does not anticipate that the proposed project would create any permanent loss of waters. EKPC is committed to avoiding impacts (i.e. crossing or operating equipment) within the larger streams spanned by the transmission line, including Bridge Fork, Laurel Creek, Wright Branch, Marsh Creek, Duck Run, Jellico Creek, the Cumberland River, Youngs Creek, Blake Fork, and Watts Creek, refer to *Stream Crossing/Wetland Avoidance Maps 1 – 4* in Exhibit B – *Project Maps*, Pg. 79. Therefore, EKPC does not anticipate significant impacts to perennial streams as a result of the proposed project. However, construction of the proposed transmission line would likely require some ephemeral/intermittent stream crossings in order to access the project area.

The stream impacts associated with these crossings are permitted under U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) 12 and the Kentucky Division of Water (KDOW) General 401 Water Quality Certification (WQC). The NWP 12 general conditions allow for stream crossings, provided the total loss of waters of the U.S. does not exceed 0.5 acre for a single and complete project. While there are no permanent impacts anticipated, it is possible temporary stream impacts associated with construction access road crossings could occur. Appropriate

measures would be taken to maintain normal downstream flows and materials would be placed in a manner so as not be eroded by expected high flows. All temporary construction accesses would be removed in their entirety, returned to pre-construction elevations, and revegetated following construction. Access roads required for maintenance activities and constructed above pre-construction contours and elevations in waters of the U.S. would be properly culverted to maintain surface flows. EKPC reviewed the pre-construction notification (PCN) requirements of NWP 12, which require notifying the District Engineer prior to commencing the activity if any of the following criteria are met:

(1) Mechanized land clearing in a forested wetland for the utility line ROW
(2) A section 10 permit is required
(3) The utility line in waters of the U.S., excluding overhead lines, exceeds 500 feet
(4) The utility line is placed within a jurisdictional area (i.e., water of the U.S.), and it runs parallel to or along a stream bed that is within that jurisdictional area
(5) Discharges that result in the loss of greater than 1/10-acre of waters of the U.S.
(6) Permanent access roads constructed above grade in waters of the U.S. for a distance of more than 500 feet; or
(7) Permanent access roads are constructed in waters of the U.S. with impervious materials

EKPC evaluated the above criteria and provides the following responses to these items:

(a) Mechanized land clearing in a forested wetland will not occur.
(b) Although the project crosses the Cumberland River, the local USACE office has confirmed that the project would be considered maintenance and a Section 10 Permit is not required.
(c) This is an overhead line.
(d) The line will traverse a jurisdictional water of the U.S., but will not run parallel to a streambed.
(e) Construction of the line will result in less than 1/10-acre loss of waters of the U.S.
(f), (g) No permanent above grade/impervious access roads will be constructed in waters of the U.S.

Based upon the information gathered (which is further discussed below), the proposed project will have no significant impacts to wetlands or streams. The proposed project crosses the Cumberland River, which is a Section 10 water. However, EKPC contacted the local USACE office and got their confirmation in an email dated August 26, 2019 that a Section 10 Permit is not required because the project entails straight replacement, in the same alignment, with no work occurring in WOTUS, and no additional lines being hung. A copy of the email is included in Exhibit D – *Agency Correspondence*, Pg. 143. Therefore, this work would be covered under a maintenance classification and no permit verification is required from their office.

The KDOW also requires notification if the project cannot meet the conditions of the general WQC. EKPC evaluated the anticipated project impacts against the requirements of the WQC and has determined it can meet the conditions for coverage under the general certification. Per these requirements, erosion and sedimentation pollution control plans and BMPs would be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur (401 KAR 10:031 Section 2 and KRS 224.70-100). As part of the project floodplain permit submittal, the KDOW WQC Section

also reviewed the project and confirmed via email dated February 4, 2020 that this project is covered under the KY General Certification of the Nationwide Permit #12 for Utility Line Backfill and Bedding.

The NWPs and general WQC are available to provide a streamlined means for the KDOW and USACE to approve activities that have minimal impacts on the environment. The temporary stream crossing activities under consideration for the proposed project fall below the notification requirements of NWP 12 and the general WQC. Therefore, no significant impacts to wetlands or streams are anticipated as a result of this project.

3.4.2 Affected Environment

The western portion of the proposed project area is composed of steeply sloping hills and valleys that drain to several tributaries of the Cumberland River. The eastern portion of the project area runs roughly parallel to the Cumberland River and crosses the downstream portion of several tributaries to the river in wider valleys. Field assessments were conducted within the project area, although due to the avoidance measures to be implemented during construction activities a detailed delineation of jurisdictional waters of the U.S. was not conducted within the project area. In addition to the field assessments, several sources of data were reviewed to identify and ultimately avoid impacts to jurisdictional waters of the U.S. including:

- U.S. Geologic Survey (USGS) topographic maps;
- USGS National Hydrography Dataset (NHD);
- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) dataset;
- Natural Resources Conservation Service (NRCS) SSURGO (soil) dataset; and
- Aerial photographs

3.4.2.1 Streams

Based upon the data reviewed and field surveys, jurisdictional waters/wetlands identified within the project footprint include perennial and intermittent streams as well as a few scattered ponds and wetlands. A perennial stream is defined as a stream or river that has continuous flow in parts, or all, of its streambed all year round during years of normal rainfall. An intermittent stream is defined as a stream which carries water a considerable portion of the time, but which ceases to flow occasionally or seasonally because bed seepage and evapotranspiration exceed the available water supply. Non-jurisdictional waters are also present within the survey area and include small, isolated ponds and wetlands as well as ephemeral streams and ditches constructed along roadways for the purpose of stormwater management.

The proposed route for the transmission line traverses several perennial streams, including Bridge Fork, Laurel Creek, Wright Branch, Marsh Creek, Duck Run, Jellico Creek, the Cumberland River, Youngs Creek, Blake Fork, and Watts Creek (See *Stream Crossing/Wetland Avoidance Maps 1 – 4* included in Exhibit B – *Project Maps*, Pg. 79). Several of the watercourses traversed by the proposed transmission line route have special resource designations at the proposed crossings, including being designated as a Special Use Water (*exceptional water*), Outstanding State Resource Waters, Cold Water Aquatic Habitats, Reference Reach, and/or supporting populations of threatened/endangered species. The Cumberland River has a State Wild River designation approximately 3.7 miles

downstream of where it is crossed by the project. The stream designations are summarized in Table 4 below. The balance of the creeks and streams in the proposed project area meet their designated uses for water quality and aquatic biota. Laurel Creek is listed on the state 303(d) list for 2016 as impaired in one segment due to partially supporting aquatic life. This designation applies from stream mile 3.7 to 5.2, which overlaps only the fifth and westernmost of the five crossings of Laurel Creek. The Cumberland River is recognized as being navigable but does not require a Section 10 permit for the proposed project, as discussed in Section 3.4.1: *Introduction* above. None of the other streams that would be traversed by the proposed transmission line are recognized as navigable.

Table 4. Streams with Special Water Resource Designations.

Stream	Outstanding National Resource Water	Outstanding State Resource Water	Exceptional Water	Cold Water Aquatic Habitat	Federal T/E Species Documented	Reference Reach	Impaired
Jellico Creek			X				
Laurel Creek		X	X	X	X		Partially supports aquatic life**
Marsh Creek	X	X			X	X	
Youngs Creek		X			X		

* Data included in Table 4 was obtained from the Kentucky Division of Water 2020 Special Waters Listing website (Dated January 3, 2020) – *https://eec.ky.gov/Environmental-Protection/Water/Regs/Pages/SpecialH2O.aspx*

** Impairment designation in segment from mile 3.7 to 5.2 (Elisha Branch to KY 478).

3.4.2.2 Wetlands

"Wetlands" refers to areas which meet the criteria for the definition of a wetland, as adopted by the U.S. Environmental Protection Agency (USEPA) and the USACE for administering Section 404 of the CWA. According to this definition, wetlands are:

> *"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."*

The proposed project area was reviewed on the U.S. Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) website (*http://www.fws.gov/wetlands-/Data/Mapper.html*) to determine if any wetlands would be impacted by the proposed construction activities. During the NWI data review, no wetlands were identified within the project footprint except for a few small ponds scattered throughout the area, a small palustrine emergent wetland on the Cumberland River floodplain north of Redbird, and a palustrine forested wetland covering a few acres in the drainage of Youngs Creek just above the Cumberland River. Hydric soils can also be an indicator of wetland features. In general, hydric soils are those soils that support the hydrology and vegetation associated with wetlands. The hydric soils of the NRCS SSURGO dataset that occur in the project area, including Map Unit Symbol and Name:

- 30 Atkins-Stokly complex, frequently flooded;
- Bo: Bonnie silt loam, frequently flooded;
- 26B: Captina silt loam;
- 28: Cotaco silt loam;
- 15: Pope soils, frequently flooded;
- 64: Robertsville silt loam;
- St: Stendal silt loam, frequently flooded; and
- uWhtB: Whitley silt loam, rarely flooded.

The hydric soils are predominantly associated with the floodplains of larger streams in the project area, especially the Cumberland River. Field investigations within the project footprint by EKPC located a total of 17 areas containing wetland features, which were frequently associated with the areas of hydric soil (See *Stream Crossings/Wetland Avoidance Maps 1 – 4*).

3.4.3 Environmental Consequences
The direct and indirect effects of the proposed action on waters of the U.S. would be anticipated to be within the vicinity of the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)
As described in Section *3.4.2: Affected Environment*, the proposed route for the electric transmission line traverses several jurisdictional features. There are no practicable alternatives to crossing these areas should the proposed transmission line be constructed because the proposed reconstruction requires using the existing corridor.

The direct and indirect effects of the proposed action on waters of the U.S. would be anticipated to be within the vicinity of the project footprint. Direct effects to jurisdictional waters may include spanning these features. No transmission support structures would be constructed in jurisdictional waters. Furthermore, on NFS Lands none of the project access roads would impact jurisdictional waters. While there are no waters impacts anticipated on NFS Lands, it is possible temporary stream impacts associated with construction access road crossings could occur on private lands in the eastern portion of the project. Appropriate measures would be taken to maintain normal downstream flows and materials would be placed in a manner so as not to be eroded by expected high flows. On private land the new access roads would be closed or left open according to the direction of the landowners involved, with temporary stream crossings removed in their entirety, returned to pre-construction elevations, and revegetated following construction. Access roads required for maintenance activities and constructed above pre-construction contours and elevations in waters of the U.S. would be properly culverted to maintain surface flows. Compensatory mitigation would not be required for the project.

Indirect effects such as sedimentation and spills into these waters would be minimized due to the proposed BMPs discussed in Section 2.1.3 *Construction Procedures.* Resource management activities that may affect soil and/or water quality must follow applicable Kentucky Rules and Regulations per the requirements of the *Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10)* as a minimum to achieve soil and water quality objectives. On NFS land these measures would meet the

standards outlined in the USFS's *Forest Plan* that are designed for the protection of soil and water resources. When *Forest Plan* standards exceed Kentucky BMPs or water quality standards, *Forest Plan* standards shall take place. Required land clearing activities would not be initiated until absolutely necessary and all disturbed areas would be stabilized and revegetated, as soon as practicable, once construction is complete to reduce the amount of time bare soils are exposed to wind and water erosion. Appropriate erosion prevention and sedimentation control structures (e.g. berms, diversion ditches, silt traps, and silt fences) would be deployed as needed in disturbed areas during construction activities to reduce sediment loading of stormwater run-off. Temporary sediment control structures would be maintained during construction activities and not be removed until vegetation is established on the disturbed area. Required land clearing activities would not be initiated until absolutely necessary and all disturbed areas would be stabilized and revegetated, as soon as practicable, once construction is complete to reduce the amount of time bare soils are exposed to wind and water erosion. As discussed in Sections 2.1.3: *Construction Procedures*, EKPC is committed to implementing enhanced BMPs within the identified critical areas of streams. For these reasons, no significant indirect effects to waters of the U.S. are anticipated.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
Alternative B would have similar effects on the jurisdictional waters in the project area as the Proposed Action discussed above. Like the Proposed Action, Alternative B would still involve the crossing of several jurisdictional features, and would potential have temporary stream impacts associated with construction access road crossings on these features. However, Alternative B would have no effect to water quality in relation to herbicides within the DBNF because herbicides would not be utilized on NFS lands as part of this alternative.

3.4.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted waters of the U.S. within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact waters of the U.S.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to waters of the U.S. It is anticipated that any effects to jurisdictional waters of the U.S. by other projects in the identified area of influence have been or would be permitted and adequately mitigated as required under the CWA. The mitigation of impacts would result in only minor impacts to water resources from the other activities identified. As outlined in Section 3.4.3: *Environmental Consequences.*, the project would only require minimal, primarily temporary impacts of waters of the U.S., and indirect effects, such as sediment loading, impacts from herbicides, etc., if any, would be negligible given the avoidance and minimization measures described in Sections 2.1.3: *Construction Procedures* and 2.1.5: *Conservation Measures*.

Therefore, because the proposed action will have little or no direct or indirect impact on waters of the U.S. in the project area, it is unlikely those effects would interact with, or contribute to, the effects of other actions in the area to produce cumulatively significant effects on waters of the U.S.

3.5 Cultural Resources and Historic Properties

3.5.1 Introduction

Sections 106 and 110 of the National Historic Preservation Act (NHPA) provide the framework for federal review and protection of historic properties, ensuring that they are considered during federal project planning and execution. The implementing regulations for the Section 106 process have been developed by the Advisory Council on Historic Preservation. The Secretary of the Interior maintains the National Register of Historic Places (NRHP) and sets forth significance criteria for inclusion in the register. Cultural resources may be considered "historic properties" for the purpose of consideration by a federal undertaking if they meet NRHP inclusion criteria. Historic properties may be those that are formally placed in the NRHP by the Secretary of the Interior or those identified that meet the criteria and are determined eligible for inclusion.

EKPC coordinated with the Kentucky Heritage Council (KHC), State Historic Preservation Office (SHPO) to establish the area of influence/area of potential effect (APE) for the project. Due to the nature of the project, the APE for aboveground historic properties includes an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). The APE for archaeological resources was considered to be the existing 100-foot-wide transmission line ROW (50 feet on each side of the project centerline), with the addition of 50-foot wide corridors centered on the proposed access roads. Significant ground disturbing activities are only anticipated to occur within the existing 100-foot wide ROW, with only vegetation management activities not requiring significant ground disturbance in the additional area of influence. The APEs for archaeology and cultural historic resources are depicted in the *Cultural Resource APE Maps 1 – 4* located in Exhibit B – *Project Maps*, Pg. 79, which identifies the areas that have been surveyed for cultural resources.

3.5.2 Affected Environment

This section summarizes the cultural resources within the APE, which are defined as sites, features, structures, or objects that may have significant archaeological or historic value. Additionally, they can be properties that play a significant, traditional role in a community's historically based beliefs, customs, and/or practices. Cultural resources can encompass a wide range of settings, from prehistoric campsites to farmsteads constructed in the recent past.

A records review conducted for the archaeological survey revealed that 51 previous professional archaeological surveys and archaeological site investigations have been conducted within a 2.0 km (1.2 mi) radius of the current project area. These reports are cited in the archaeological report for the project. Fifty-nine (59) archaeological sites have been recorded in this area, of which two sites, 15McY719 and 15McY1009, fall within or adjacent to the current project area.

A records review for the cultural historic survey found one previous cultural historic investigation within the vicinity of the project, entitled *McCreary County Historic Resources and Folklife Survey: Final Survey Summary Report, 1995, prepared by* Donna G. Logsdon and Lynn David. A review of records maintained by the SHPO indicated that four previously surveyed resources,

MCY 213, MCY 214, WH 2, and WH 7, are located near, but not within, the area of potential effects. The CRA field survey found that two of these resources (WH 7 and WH2) had been demolished.

A Phase I Archaeological Investigation and Cultural Historic Overview Survey have been conducted for the proposed project by Cultural Resource Analysts, Inc. (CRA). The surveys were conducted within their respective defined APEs, which were granted concurrence by the KHC in email correspondence dated May 16 and 17, 2019. The following reports were developed for the current project and submitted to the SHPO for review:

Archaeological Survey of the proposed McCreary County Junction – Kentucky Utilities Wofford Transmission Line Rebuild in McCreary and Whitley Counties, Kentucky. April 13, 2020. Prepared by Howard Beverly, Jr., with contributions by Julia K.C. Gruhot; Jonathan P. Kerr, RPA 10608; and Donald A. Miller.

Cultural Historic Survey for the Proposed McCreary County Junction –. Kentucky Utilities Wofford 69 kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky. October 3, 2019. Prepared by Tim Condo.

The previous reports in combination with the most recent investigations for the proposal provide a current, comprehensive analysis of the archaeological and aboveground historic properties within the APE of the project.

During the cultural resource surveys, the majority of the identified sites were determined to be not eligible for listing in the National Register of Historic Places (NRHP). The archaeological survey of the proposed project area resulted in the identification of eight archaeological sites (15McY1363, 15McY1368, 15McY1369, 15Wh244, 15Wh245, 15Wh246, 15Wh247, and 15Wh248), one site revisit (15McY719), and four isolated finds (IF 1 – IF 4). Site 15McY1009 could not be relocated during the current survey.

Historic sites 15Wh244 and 15Wh247 contain intact historic features with the potential for numerous more features to be discovered. Given this research potential, along with their local and regional importance, the sites are recommended for either evaluation for NRHP eligibility or avoidance, and EKPC intends to avoid impacts to all documented archaeological sites. The archaeological report was submitted to the SHPO for review, with SHPO response provided via letter dated June 10, 2020.

The cultural historic overview survey of the proposed project area resulted in the identification of 81 sites, none of which had been previously surveyed. Of these sites, CRA recommended that the majority of sites are not eligible for listing on the NRHP under Criterion A, B, or C. Three residences (Sites 6, 40, and 64) were recommended for an "undetermined" NRHP status because owner permission could not be obtained to access them. The survey report was submitted to the SHPO for review, and the SHPO's response is described in Section 3.5.3 below.

Through a May 23, 2019 mailing, on behalf of RUS, EKPC sent a notification of intent to initiate section 106 review with the Federally recognized Tribes regarding historic properties that may be

affected by the proposed project. In addition, the DBNF submitted the CRA survey reports to the USFS consulting tribes for review and comment. There were no responses received by EKPC, RUS, or the USFS to these mailings. Copies of the letters to tribes are included in Exhibit D – *Agency Correspondence*, Pg. 143. If the proposed project inadvertently uncovers an archaeological site or object(s) during construction, EKPC would cease construction activities in the vicinity of the findings immediately and contact USFS, RUS, the SHPO, tribes and appropriate federal and state authorities.

Public involvement was integrated into the project on August 8, 2019 through a notice placed in the *McCreary County Voice*, which is a weekly newspaper local to the project area. The same notice was published on August 14, 2019 in *The Whitley/Corbin News Journal,* a second weekly newspaper local to the project area. The notice included the location and a brief description of the project, as well as particulars regarding Section 106 of the NHPA, which requires consideration of effects on important historic properties listed or eligible for listing in the NRHP. The Notice provided information to those individuals or groups who have an interest in the historic built and/or archaeological environment in the project area and wish to become formally involved in the consultation process as a consulting party. To date, there have been no responses regarding historic properties received from this public notice. A copy of the Notice is included in Exhibit D – *Agency Correspondence*, Pg. 143.

In addition, EKPC submitted letters to the County Judge/Executives of McCreary and Whitley Counties to invite them to participate in the Section 106 review process as a consulting party. To date, there have been no responses received from these letters, copies of the letters are included in Exhibit D – *Agency Correspondence*, Pg. 143.

3.5.3 Environmental Consequences

The potential for direct and indirect effects of the proposed action on archaeological resources is anticipated to be limited to the ground disturbing activities within the project footprint. Significant ground disturbing activities are only anticipated to occur within the existing 100-foot wide ROW, with only vegetation management activities not requiring significant ground disturbance in the additional area of influence, and the access roads. Potential effects to aboveground cultural historic resources are anticipated to occur within the project footprint, encompassing a 1,500-foot corridor (750 feet on either side of the existing ROW).

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The following summary describes the anticipated effects of the Proposed Action on resources eligible for or listed on the NRHP. The *Cultural Resource APE Maps 1 – 4* located in Exhibit B – *Project Maps*, Pg. 79 shows the location of the areas surveyed for archaeology and cultural historic resources.

Aboveground cultural resources: As discussed above, four sites (Sites 22, 27, 35, and 65) within the APE for cultural-historic resources were determined to be potentially eligible for the NRHP. However, the SHPO determined that these sites should experience no direct or indirect effects from the proposed project, and concurred with the determination of No Adverse Effect for the aboveground portions of the project.

Archaeological resources: Within the APE for archeology, there are two archaeological sites (Sites 15Wh244 and 15Wh247) that are recommended eligible for listing in the NRHP. These sites and two cemeteries (cultural-historic sites 27 and 65) located within the APE would be avoided and thus would not be impacted by the proposed project. Therefore, the proposed project would have No Adverse Effect on archaeological resources listed in or eligible for the NHRP.

As discussed above, the results of all archaeological and cultural historic surveys and recommended findings of effect for each survey conducted within the project APEs were submitted to the Kentucky SHPO for review. In response to the Cultural Historic Overview Survey report, the SHPO replied in a letter dated April 16, 2020 concurring with a finding of "not eligible" for the majority of the sites and with a finding of "undetermined" for Site 64. The SHPO recommended that Site 27 (the log-construction Piney Grove Methodist Church and its associated cemetery) appears to be eligible for listing under the NRHP under Criterion C and likely also under Criterion A. The SHPO also recommended that Sites 22 and 35 (both Craftsman-type residences), and Site 65 (a cemetery) may be eligible for the NRHP. The SHPO requested additional information about Sites 6, 22, 27, 35, 40, and 65 in regard to the construction elements and anticipated effects to assist in making determinations.

CRA provided the requested information in a letter dated April 8, 2020, and the SHPO replied in a letter dated April 16, 2020. The SHPO determined that based on the submitted information, Sites 6, 22, 27, 35, 40 and 65 should experience no direct or indirect effects from the undertaking, and that their office is able to withhold comment on the sites as their historic integrity will not be impacted by the proposed project. The SHPO concurred with the determination of No Adverse Effect for the aboveground portions of the project.

In response to the Archaeological Survey report, in a letter dated June 10, 2020, the SHPO concurred with all findings and recommendation of effects except with regard to site 15Wh244. The SHPO letter stated that they could not concur that site 15Wh244 will not be adversely affected by the proposed undertaking. This was due to the site location directly adjacent to the access road, and the SHPO believed that regardless of EKPC's proposals to block the access road, that the act of clearing the access road will provide increased access to this site. In response, Ms. Melissa Ramsey (DBNF District Archaeologist) provided additional site specific information, photographs, and mapping regarding the existing access road and EKPCs plans to protect site 15Wh244 for SHPO consideration in letters dated June 29, and August 14, 2020. Based on this additional information and the protection measures that would be implemented, the SHPO was able to concur with a No Adverse Effect determination for the project via letter dated September 9, 2020. In view of these findings, the USFS and RUS have fulfilled the requirements of Section 106 of the NHPA for this project. Copies of the SHPO responses are included in Exhibit D – *Agency Correspondence*, Pg. 143.

The new access roads required for the project could potentially increase access for looters to archaeological sites within the APE. However, once construction of the proposed transmission line is completed, the proposed access roads on USFS land will be closed to the public by means of a keyed gate placed at the entrance to block public access and to allow for the future maintenance of the line, or otherwise the proposed access roads will be blocked (e.g. bermed) to prevent access.

On private land the new access roads would be closed or left open according to the direction of the landowners involved.

The use of herbicides as outlined in the Proposed Action to control vegetation within the proposed transmission line ROW would not have any effect on cultural resources.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
As described above, the use of herbicides as outlined in the proposal to maintain the proposed electric transmission line ROW would not have any effect on cultural resources in the project area. Therefore, Alternative B, the proposed action without the use of herbicides on NFS lands, would have similar effects on cultural resources in the project area as the Proposed Action, discussed above.

3.5.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Cultural Resources and Historic Properties within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Cultural Resources and Historic Properties.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action and Alternatives B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to historic and archaeological resources. According to the archaeological survey and cultural historic survey conducted for the proposed project and the avoidance measures incorporated into the proposed project, there would be no adverse effect to archaeological and/or cultural resources. EKPC has committed to avoiding archaeological sites which lie within the project footprint, and where cultural historic sites lie within the project APE the proposed project activities will not constitute a visual intrusion within the property's setting and will not diminish the sites' architectural characteristics or historic associations. As described above, no eligible historic or archaeological resources would be adversely impacted by the proposed project. Therefore, the proposed action would not interact with the effects of the other actions to produce cumulative effects on cultural resources.

3.6 Threatened and Endangered Species

3.6.1 Introduction
In 1973, Congress passed the Endangered Species Act (ESA), recognizing that: (1) various species of fish, wildlife, and plants in the U.S. have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation, (2) other species of fish, wildlife, and plants have been so depleted in numbers that they are in danger of or threatened with extinction, and (3) these species of fish, wildlife, and plants are of esthetic, ecological,

educational, historical, recreational, and scientific value to the U.S. and its people. The intended purpose of the ESA is to provide a means by which the ecosystems upon which endangered and threatened species depend may be conserved and to provide a program for their conservation.

The term ‘‘critical habitat’’ for an endangered species means the specific areas within the geographical area occupied by the species on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection. In accordance with sections 3(5)(A)(I) and 4(b)(1)(A) of the Endangered Species Act, species for which Critical Habitat has been designated within or adjacent to lands administered by the DBNF were reviewed and are described in Section 3.6.2: *Affected Environment* below.

The area of influence for threatened and endangered species was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). However, any potential impacts associated with federally threatened and endangered species are anticipated to be localized within the area where project related disturbances would occur. The federally listed species are being addressed in this section, with USFS Sensitive Species and DBNF Conservation and MIS evaluated in Section 3.7 *Fish and Wildlife Resources* below.

3.6.2 Affected Environment

Based upon the construction activities outlined in Section 2.0: *Proposed Action and Alternatives* above and the resulting disturbance to the existing environment, EKPC evaluated the potential of the project to affect federally-listed threatened or endangered species or critical habitats that are known to occur, or could potentially occur within the project area.

A detailed summary of the direct, indirect, and cumulative effects for the species evaluated is provided for each alternative and a summary table can be found in the *Biological Assessment and Evaluation, McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, Daniel Boone National Forest, Stearns Ranger District, McCreary and Whitley Counties, Kentucky* (Young, 2020). The Biological Assessment and Evaluation (BAE) documents the twenty-six (26) U.S. Fish and Wildlife Service (USFWS) federally listed threatened and endangered species and forty-three (43) USFWS designated critical habitat stream segments that occur or potentially occur on the DBNF in Kentucky. Kentucky does not currently have any species that are federally proposed for listing as threatened or endangered by the USFWS.

In order to determine the scope of analysis, a preliminary evaluation was conducted for each potentially affected species and Designated Critical Habitat. A total of 18 federally listed Endangered and Threatened species and 41 designated critical habitat stream segments for federally endangered species were considered but not evaluated in detail as part of this analysis. These species were eliminated from detailed consideration based on range, lack of suitable habitat, and lack of occurrence within the project area of impact (such as calcareous or cave obligates, a habitat type that would not be impacted by project activities). EKPC utilized IPaC data, OKNP database results, and site-specific field surveys to determine which species were eliminated from further consideration and the rationale for eliminating them. A total of eight federally listed species and three USFWS Critical Habitat stream segments were analyzed in detail. Detailed analysis is

found in the BAE Report (Young, 2020). Federally listed species and habitats receiving detailed evaluation in the BAE are included in the following Tables:

Table 5. Federally listed species selected for detailed analysis in the BAE.

Group	Species	Common Name	Status
Mammal	*Myotis grisescens*	gray bat	Endangered
	Myotis sodalis	Indiana bat	Endangered
	Corynorhinus townsendii virginianus	Virginia big-eared bat	Endangered
	Myotis septentrionalis	northern long-eared bat	Threatened
Fish	*Chrosomus cumberlandensis*	blackside dace	Threatened
	Etheostoma susanae	Cumberland darter	Endangered
Mussel	*Alasmidonta atropurpurea*	Cumberland elktoe	Endangered
Plant	*Platanthera integrilabia*	white fringeless orchid	Threatened

Table 6. Critical Habitats selected for detailed analysis in the BAE.

	Stream Name	Associated Species	Administrative Location	Designated Segment
1	Marsh Creek	Cumberland elktoe	Stearns Ranger District	Marsh Creek mainstem from its confluence with the Cumberland River, upstream to State Road 92 bridge
12	Laurel Creek	Cumberland darter	Stearns Ranger District	Includes 5.9 river miles of Laurel Fork Creek from Laurel Fork Reservoir downstream to its confluence with Jenneys Branch
	Youngs Creek	Cumberland darter	Private property	Includes 4.6 mi of Youngs Creek from Brays Chapel Road downstream to its confluence with the Cumberland River

3.6.3 Environmental Consequences

The direct and indirect effects of the proposed action on threatened and endangered species are anticipated to be limited to the confines of the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

A Biological Assessment and Evaluation (BAE) was completed to evaluate possible effects the construction of the proposed electric transmission line could have on threatened and endangered species, with the project BAE incorporated by reference to this EA document. Based on information obtained from the USFWS and OKNP, eight federally-listed species are known to occur or have the potential to occur in the vicinity of the proposed project. Several species identified as having the potential to occur on the DBNF were not analyzed in detail because they either have ranges that are well outside the proposed project area or do not have suitable habitat within the action area of the proposed project. An evaluation of the remaining species resulted in the effects determinations included in the following sections.

Based on analysis detailed in the BAE (Young, 2020), there would be no significant direct or indirect effects to the gray bat, Indiana bat, Virginia big-eared bat, northern long-eared bat,

blackside dace, Cumberland darter, Cumberland elktoe, white fringeless orchid, or Critical Habitats as a result of implementing the Proposed Action. These findings were based on the existing occurrence data, negative survey results, compliance with the conservation measures in the Final 4(d) rule for the NLEB, and avoidance and minimization measures to be implemented in the vicinity of sensitive aquatic habitats. For these reasons it is anticipated that the proposed project is not likely to jeopardize/adversely affect the eight federally listed species or Critical Habitats known to occur or having the potential to occur in the area. After reviewing the provided information, by letter dated August 21, 2020, the USFWS concurred with EKPC's findings that the proposed project is not likely to jeopardize/adversely affect the evaluated species. In view of these findings, the USFS and RUS have fulfilled the requirements of Section 7 of the Endangered Species Act for this project. A copy of all correspondence with the USFWS is included in Exhibit D – *Agency Correspondence*, Pg. 143.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
For all of the listed species discussed above in Section 3.6.3, the effects from this alternative would be the same as the Proposed Action except the effects from herbicide use would be eliminated.

3.6.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Threatened and Endangered Species within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Threatened and Endangered Species.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the proposed action as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal effects on threatened or endangered species and the USFWS concurred with the recommended not likely to adversely affect/jeopardize determination. Therefore, no cumulative effects for federally-listed species are expected from this project.

3.7 Fish and Wildlife Resources

3.7.1 Introduction
This section describes the affected environment and environmental consequences as they apply to fish and wildlife resources that are not federally listed as threatened or endangered. The area of influence for fish and wildlife resources was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). This buffer was considered a reasonable area that would encompass all identified fish and wildlife resources in the vicinity. However, no impacts to fish and wildlife resources are anticipated beyond the project footprint of the proposed action.

3.7.2 Affected Environment

The project area provides habitat to a variety of mammal, bird, reptile, amphibian, and invertebrate species that are not listed as federally threatened or endangered species. Several perennial, intermittent, and ephemeral streams and a few ponds are present within the project corridor. The perennial streams and ponds could provide habitat for fish species and other aquatic organisms that require a permanent water source, and the intermittent and ephemeral streams could provide habitat for aquatic and semi-aquatic organisms that can tolerate occasional drying of the stream bed. Major permanent water features in the corridor include the Cumberland River, Laurel Creek, Marsh Creek, Jellico Creek, and Youngs Creek and are further described in Section 3.4: *Jurisdictional Waters of the U.S.*

Common terrestrial wildlife species in the project area include white-tailed deer, wild turkey, gray squirrel, northern cardinal, Carolina wren, American robin, eastern box turtle, black rat snake, eastern milk snake, American toad, and dusky salamander. Information regarding USFS Regional Forester Sensitive species, DBNF Management Indicator Species, and DBNF Conservation species was reviewed to identify these types of species that could potentially occur within the project impact area. For a full listing of the 72 USFS Regional Forester Sensitive species, 15 DBNF MIS, and 155 Conservation Species for the DBNF analyzed, refer to the project BAE report entitled *Biological Assessment and Evaluation, McCreary County Junction – KU Wofford 69 kV Transmission Line Rebuild Project, Daniel Boone National Forest, Stearns Ranger District, McCreary and Whitley Counties, Kentucky,* East Kentucky Power Cooperative, which is incorporated by reference into this document.

3.7.3 Environmental Consequences

The direct and indirect effects of the proposed action on fish and wildlife resources would be anticipated to be limited to the confines of the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

A BAE was completed to evaluate possible effects the reconstruction of the proposed electric transmission line could have on fish and wildlife species. Several species were not analyzed in detail because they either have ranges that are well outside the proposed project area or do not have suitable habitat within the action area of the proposed project. An evaluation of the remaining species resulted in the effects determinations included in the following sections. Please note that non-federally-listed plant species are addressed in Section 3.8: *Vegetation.*

Based on analysis detailed in the BAE, there would be no significant direct or indirect effects to the 15 USFS Sensitive Species, 54 DBNF Conservation Species, and 11 MIS species analyzed in detail, as a result of implementing the Proposed Action. These findings were based on the existing occurrence data, negative survey results, and avoidance and minimization measures to be implemented in the vicinity of sensitive aquatic habitats. For these reasons it is anticipated that construction of the proposed project may impact individuals of these common fish and wildlife resources or USFS monitored species directly or indirectly; however, the potential impacts to individuals is not likely to cause a trend toward federal listing or loss of viability.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
For all of the listed species discussed above in Section 3.7.3, the effects from this alternative would be the same as the Proposed Action except the effects from herbicide use would be eliminated.

3.7.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted fish and wildlife resources within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact fish and wildlife resources.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action or Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal impact to individual fish and wildlife resources is not likely to cause a trend toward federal listing or loss of viability. Therefore, no cumulative effects for fish and wildlife resources are expected from this project.

3.8 Vegetation

3.8.1 Introduction
This section discusses the vegetation in the proposed project area that may be affected by the proposal. The area of influence for vegetation was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). This buffer was considered a reasonable area that would encompass representative vegetation of this region of southeastern Kentucky, which is typified by forest, agriculture, and scattered development. However, impacts to vegetation associated with the proposed project would be localized to the project footprint.

3.8.2 Affected Environment
The action area is located in the Mixed Mesophytic Forest Region, which extends across the eastern third of Kentucky and is closely associated with the Appalachian Plateau physiographic province of the state (Jones 2005). In this portion of the state the forests are characterized by a rich overstory dominated by a mixture of deciduous tree species, especially oaks and hickories, as well as American elm, American basswood, black cherry, black walnut, and white ash. However, the proposed transmission line project would involve the rebuilding of an existing facility, which is maintained by EKPC and property owners as agricultural/rural residential lands, low growing herbaceous plant communities, and small woody stemmed vegetation.

The forested areas adjacent to the existing transmission line ROW are typical of the mixed mesophytic forest type, dominated by tree species including oaks (*Quercus alba, Q. montana, Q. rubra, Q. velutina*), American beech (*Fagus grandifolia*), sugar maple (*Acer saccharum*), tulip poplar (*Liriodendron tulipifera*), white ash (*Fraxinus americana*), hickories (*C. cordiformis*,

Carya glabra and *C. ovata, C. tomentosa*), big and umbrella magnolias (*Magnolia macrophylla, M. tripetela*), white basswood (*Tilia heterophylla*), and yellow buckeye (*Aesculus flava*). The understory in these forests consists of pawpaw (*Asimina triloba*), red bud (*Cercis canadensis*), sassafras (*Sassafras albidum*), spicebush (*Lindera benzoin*), huckleberries (*Gaylussacia* sp.), and mountain laurel (*Kalmia latifolia*). Forested areas in the valleys also contain many of these species, as well as bottomland species such as sycamore (*Platanus occidentalis*), box elder (*Acer negundo*), river birch (*Betula nigra*), American elm (*Ulmus americana*), and Eastern hemlock (*Tsuga canadensis*). Historically, *Pinus* sp. represented a much higher percentage of the forest makeup of the SRD; however, the recent southern pine beetle (*Dendroctonus frontalis*) epidemic, has resulted in very few live pines within the project area.

Areas with steeper topography within the project area are typically forested, while areas suitable for agriculture and development along flat ridgetops and valleys have been converted to these activities. Forested land is much more abundant within the DBNF in the western portion of the project. Two major vegetation types have been characterized within the project corridor, including open areas and early successional habitat within the ROW, and mixed deciduous forest along the edges of the ROW. As part of this project, EKPC would field verify and clear approximately 73.7 acres to reestablish the 100-foot-wide ROW. This tree clearing would also include LIDAR identified hazard trees that due to their height and/or position relative to the new line could fall and come into contact with the energized conductor. Other than reestablishment of the 100-foot-wide ROW, there would be no vegetation management required for reconstruction of the facility.

The records provided by OKNP identified Archers Creek, Cumberland River Macrosite, Duck Run Streamhead, Gilreath Pine Barrens, Jellico Creek, KY 700 Roadsides, Laurel Creek Watershed Macrosite, Marsh Creek Corridor Macrosite, and Youngs Creek Macrosite as areas of significant biodiversity within 2.5 miles of the proposed project area. (Exhibit D – *Agency Correspondence*, Pg. 143.). In addition, the record search also returned records within the area of influence for several plant species characteristic of habitats with low levels of disturbance. Each native plant species within Kentucky has been assigned a coefficient of conservatism (COC) value on a scale that ranges from 0 (highly tolerant of disturbance, little fidelity to any natural community) to 10 (highly intolerant of disturbance, restricted to pre-settlement remnants) (White 2004, Rothrock 2004).

Table 7. OKNP Rare plant records located within the area of influence.

Species	Common Name	Coefficient of Conservatism[1]	Habitat[2]
Bartonia virginica	Yellow Screwstem	8	Wet prairies and sphagnum bogs.
Castanea pumila	Allegheny Chinkapin	9	Xeric open, upland forest, generally in fire- maintained habitats.
Hexastylis contracta	Southern Heartleaf	10	Deciduous forests with acidic soil.
Lilium philadelphicum	Wood Lily	9	Woodland borders or associated with grass dominated areas, and prefers open habitat.

Species	Common Name	Coefficient of Conservatism[1]	Habitat[2]
Sabatia brachiata	Narrow-Leaf Pink	NA*	Mesic pinelands, sandhills, pine savannas and flatwoods. Known only from vicinity of project powerline, Duck Run, KY

[1] Coefficient of Conservatism values obtained from White's list for Kentucky (2004).
[2] Habitat descriptions taken from Greenwood Vegetation Management Project, Wildlife Resource Report (Metzmeier 2016) or from list of OKNP records.
*No value was assigned to this species in the COC list for Kentucky.

Rothrock classifies a COC rating of 8 as indicating "species found in high-quality remnant plant communities but that appear to endure, from time to time, some disturbance." COC ratings of 9 and 10 are classified as "species restricted to remnant landscapes that appear to have suffered very little post-settlement trauma" (Rothrock 2004). All of the above records occur in the western half of the project within McCreary County, and all the records except for Allegheny Chinkapin are located on NFS lands and within the existing ROW. Some additional records for rare plants may be located within the area of influence, but their coordinates have not been distributed by OKNP due to the sensitive nature of the occurrence. Therefore, the locations of these plants appear to indicate areas of high-quality native vegetation.

As discussed in Section 3.7: *Fish and Wildlife Resources*, 15 USFS Sensitive Species and 54 DBNF Conservation Species are analyzed in detail in the BAE. The *Forest Plan* also contains a list of 15 MIS, which have been identified because their population changes are believed to indicate the effects of management activities of the forest. In general, the MIS approach is used to reduce the complexity of discussing all the species on the DBNF because MIS represent groups of wildlife associated with similar habitats. Evaluating the effects of management practices on these species and their habitats also displays the effects of the proposed action and no action on the ecological communities they represent and helps to ensure that biodiversity is maintained. Of the 11 MIS species analyzed in the BAE, the only plant species is pitch pine (*Pinus rigida*).

3.8.3 Environmental Consequences

The direct and indirect effects of the proposed action on vegetation would be anticipated to be within the identified project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

As discussed in Section 3.6.3: *Environmental Consequences for Threatened/Endangered Species*, a Biological Assessment and Evaluation (BAE) was completed to evaluate possible effects the construction of the proposed electric transmission line could have on plant species. Several species were not analyzed in detail because they either have ranges that are well outside the proposed project area or do not have suitable habitat within the action area of the proposed project. An evaluation of the remaining species resulted in the effects determinations included in the following sections. Please note that non-federally-listed animal species are addressed in Section 3.7: *Fish and Wildlife Resources.*

Based on analysis detailed in the BAE, there would be no significant direct or indirect effects to the 15 USFS Sensitive Species, 54 DBNF Conservation Species, and 11 MIS species analyzed in

detail, as a result of implementing the Proposed Action. These findings were based on the existing occurrence data, negative survey results, and avoidance and minimization measures to be implemented in the vicinity of sensitive aquatic habitats. For these reasons it is anticipated that construction of the proposed project may impact individuals of these USFS monitored species directly or indirectly; however, the potential impact to individuals is not likely to cause a trend toward federal listing or loss of viability, and no significant impacts are expected on these species' population in the SRD (or DBNF).

The introduction of herbicide applications, as described in the proposal, would result in vegetation in the ROW becoming comprised mostly of low growing plant species including shrubs, ferns, grasses, forbs and low growing tree species, such as redbud and dogwoods (USFS 1997). The majority of the taller growing tree species would be eliminated over time by the herbicide applications (USFS 1997). The utilization of herbicides would also result in an increase in the diversity of the vegetation within the ROW (USFS 1997). Through the use of herbicides, woody-stemmed species within the ROW would be reduced or eliminated, and competition for low growing species would be reduced (USFS 1997). Many of these low growing species require open areas to thrive and with the absence of tree cover low growing plant communities can better become established (USFS 1997). In some instances, under the right conditions, seeds that may be present on the ROW and have a long period of viability will germinate (USFS 1997).

For the Proposed Action, potential effects to non-target vegetation from herbicide application would be reduced by adhering to the following *Forest Plan* Standards.

DB-VEG-1 – Hazard trees (dead or alive) considered to be an immediate threat to human safety may be removed anytime. This supersedes all other standards.

DB-VEG-3 – Logging or site preparation equipment, rubber-tired or tracked, is not to be used on plastic soils when the water table is within 12 inches of the surface or when soil moisture exceeds the plastic limit.

DB-VEG-8 – Herbicides will be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting human and wildlife health. Application rate and work time must not exceed levels that pose an unacceptable level of risk to human or wildlife health. The Forest Service, southern Region standard for acceptable level of risk requires a Margin of Safety (MOS) > 100 or, Hazard quotient (HQ) < 1.0.

DB-VEG-9 - Monitor weather and suspend project if temperature, humidity, or wind becomes unfavorable according to the criteria below:

Ground:	Temperatures Higher Than (°F)	Humidity Less Than (%)	Wind (at Target) Greater Than (MPH)
Hand (cut surface)	n/a	n/a	n/a
Hand (other)	98	20	15
Mechanical (liquid)	95	30	10
Mechanical (granular)	n/a	n/a	10

DB-VEG-10 – Use only nozzles that produce droplets (mean droplet size of 50 microns or greater) or streams of herbicides. Nozzles that produce fine droplets may be used only for hand treatment, where distance from nozzle to target does not exceed eight feet.

DB-VEG-11 – Areas treated with herbicides are to be clearly posted with noticed signs to warn visitors of the treatment.

DB-VEG-13 – No soil active herbicide will be applied within 30 feet of the drip line of non-target vegetation.

DB-VEG-17 – No soil-active herbicide is to be applied within 60 feet of any known PETS plant species.

3.8.4 Non-native Invasive Plants

Non-native invasive plants, often called exotic, non-indigenous, alien, or noxious weeds, have been introduced to varying degrees into the project vicinity. A few of these plants are aggressive colonizers with few natural predators to maintain population balances. They can increase across the landscape with little opposition, beyond the control and reclamation measures applied by landowners and managers on individual land holdings. An examination of the plant species taken from the *USDA Forest Service, Nonnative Invasive Plants of Southern Forests, A Field Guide for Identification and Control* (Miller 2003) has been conducted to determine the existence of populations, the potential of this project to affect these populations, and the potential for affecting colonization where no population now exists. A detailed listing of these species and their general effects concerns is included in the project BAE.

Most of the invasive species examined above are not expected to be affected by the ROW maintenance, either now, or in the future. In some cases, the establishment, growth, and expansion are favored by the creation of additional or better habitat (road ROW, edge of ROW, etc.), but in other cases the application of herbicides will reduce the number, size, and seed source of existing populations. The most noted exceptions to the above would be in the case of kudzu and miscanthus if these were to become established within the ROW. However, patches of kudzu or miscanthus within the project area were not identified during the field surveys. Japanese honeysuckle will be provided additional habitat and is not likely to be adversely affected by the application of herbicides. However, this particular species is so widespread that the overall effect would be of little consequence in the project area.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The manual and mechanical vegetation cutting techniques used to maintain the existing transmission line ROW would remain in place, absent the use of herbicides on NFS land. This would continue to result in portions of the ROW in less accessible areas being composed of tree sprouts, seedlings, and saplings. Between manual treatments, these tree sprouts would mature and compete with most shrubs, ferns, grasses and forbs, eventually crowding out these low growing species. Should heavy deer browsing then occur, those tree species not favored by deer, i.e., American beech and American hornbeam, would become dominant (USFS 1997). The resprouting of cut woody stemmed vegetation and the establishment of new tree seedlings on the ROW would increase the concentration of undesirable plants and competition from the trees would reduce the presence of the more desirable low growing vegetation (USFS 1997), leading to an increase in early successional type forest habitat. Portions of the existing ROW on NFS lands were inadvertently treated with herbicides by EKPC's contractor in 2018, which in combination with USFS prescribed fires has resulted in the desired, diverse low growing herbaceous plant community, which is often rich in pollinator species. On the following pages are representative photographs from within the existing ROW depicting the overgrown, early successional habitat that develops in areas of the ROW where only manual and/or mechanical means of maintenance have been utilized versus the preferred vegetative conditions achieved through maintenance using herbicides and/or prescribed fire.

Overgrown ROW in vicinity of Laurel Creek, no herbicide

Portion of ROW with herbicide and prescribed fire treatment

Overgrown ROW on hillside, only manual maintenance

Portion of ROW with herbicide treatment

Overgrown ROW at Bridge Fork, no herbicide

Portion of ROW with herbicide and prescribed fire treatment

Overgrown ROW, difficult equipment access, no herbicide

Pollinator habitat in portion of ROW with herbicide treatment

3.8.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. Other actions identified through this assessment that would also impact vegetation within the project area, include the USFS routine herbicide treatments to prevent encroachment of native trees or Non-Native Invasive Plant Species (NNIPS) The use of herbicides by USFS also occurred in 2019-2020 to prepare native pollinator habitat sites for plantings adjacent to the existing ROW in the vicinity of Duck Run, although there are no additional herbicide applications anticipated for this project. There were no other actions identified when added to the actions of the proposed transmission line reconstruction project that would measurably impact vegetation.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the proposed action as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal impacts to individual plants and is not likely to cause a trend toward federal listing or loss of viability, and no significant impacts are expected on these species' population in the SRD (or DBNF). For the Proposed Action, herbicide applications would be tracked by the USFS through annual Pesticide Use Proposals, which are required to ensure herbicides use is monitored and measured to prevent the risk of excess use of various chemicals. Furthermore, the proposed application methods (low-volume, selective herbicide treatment by licensed applicators), occurring every three to five years, would further reduce the potential for cumulative effects when considered in combination with the USFS herbicide uses. Therefore, because the proposed action will have little or no direct or indirect impact on vegetation in the project area, it is unlikely those effects would interact with, or contribute to, the effects of other actions in the area to produce cumulatively significant effects on vegetation.

3.9 Air Quality

3.9.1 Introduction

Pursuant to 401 KAR 63:010, fugitive dust emissions are subject to specific requirements. As discussed below, fugitive dust emissions from the proposed action would be temporary and be controlled such that there would be no increase in emissions. Mobile emission sources would range from passenger vehicles and trucks to large equipment required for installing transmission lines and pole structures. These vehicles would be subject to mobile source emission standards under the Clean Air Act which minimize emissions. The relatively small amount of traffic would not contribute appreciably to ambient air pollutant concentrations in the area.

The requirements of 401 KAR 63:010 Section 3(2) state that "no person shall cause or permit the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate." The proposed project consists of a corridor many miles long that overlaps many properties. Therefore, the area of influence for air quality was considered to be the project footprint, which consists of the immediate area involved in the proposed action where disturbances associated with the reconstruction, operation, and maintenance of the McCreary – Wofford Transmission Line Project would be most likely to occur, including hazard tree removal. The project footprint would include a 150-foot-wide corridor encompassing 75 feet on either side of the existing centerline and the access roads. The project footprint was considered appropriate because all work associated with the proposal would occur within this area.

Under the *Clean Air Act Amendments of 1977,* NFS lands associated with the DBNF have a Class II designation. Only minimal increases in air pollution are allowed in Class I areas and greater increases in air pollution are allowed in Class II areas. All land within the U.S. has either a Class I or Class II designation. In 1977 when the designations took place only a very small portion of public lands were designated as Class I areas. No Class I areas exist on the DBNF because there were no eligible sites in 1977 (USFS 1998).

Kentucky follows protocol established through the EPA in monitoring air quality. There were no Kentucky Division for Air Quality monitoring stations in either McCreary or Whitley Counties described in the KDAQ's *Kentucky Annual Ambient Air Monitoring Network Plan 2019* (KDAQ 2019). Monitoring was conducted in nearby Pulaski, Bell, and Perry Counties for some, but not all, of the six air quality parameters established by the EPA. There were no problems identified in this report (EPA 2020).

3.9.2 Affected Environment

As explained below, fugitive dust emissions from the proposed action would be temporary and controlled such that fugitive dust would not leave the project footprint boundaries. McCreary and Whitley Counties have not been identified as nonattainment for any existing ambient air quality standards. The nearest nonattainment areas to the project footprint are associated with Bullitt County/Greater Louisville Metro Area about 100 miles to the northwest and with Sullivan County, Tennessee, about 100 miles to the east (EPA 2020).

3.9.3 Environmental Consequences

The direct and indirect effects of the proposed action on air quality are anticipated to be restricted to the project footprint.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The direct and indirect effects of the proposed action on air quality would be anticipated to occur in the vicinity of the project footprint. Exhaust from the engines of the machinery and vehicles used to reconstruct and maintain the proposed electric line as outlined in the Proposed Action may increase emissions in the immediate area on a short-term basis. However, the components of exhaust are volatile and would move out of the immediate project area within a short period of time (USFS 1997). Additionally, it is doubtful that the exhaust from such machinery would contribute to the overall concentration of ozone, nitrogen oxides, aldehydes or other noxious substances (USFS 1997). All equipment and vehicles used during operations would be subject to mobile source emission standards under the Clean Air Act that minimize emissions. Therefore, the exhaust from engines used to reconstruct and maintain the transmission line would be expected to have a minor, temporary effect on the air quality of the project area with no significant direct or indirect effects anticipated.

The dust associated with the proposed construction activity could have a small potential for affecting the air quality of the immediate project impact area. However, this source of air quality degradation would not be anticipated to have any major effect on the area. Any dust associated with construction activities would be short-term, lasting only through the construction phase of the project, and the areas denuded of vegetation would be fairly small. As a result, the amount of air quality degradation associated with fugitive dust would be negligible and once construction is completed there would be a return to ambient air quality conditions in the immediate vicinity of the project impact area. No dust would be associated with the maintenance of the proposed project once the construction activities are completed. The ROW would be maintained by the selective manual foliar method of herbicide application, which would not produce any dust. Therefore, EKPC does not anticipate significant direct or indirect effects associated with fugitive dust from the proposal.

The herbicides proposed for use to maintain the proposed expanded ROW as part of the Proposed Action would have only a minor effect on the air quality of the project area due to the application methods being proposed. The herbicides would be applied using localized selective manual spraying techniques incorporating large droplet nozzles that are not subject to spray drift. No long-range spraying heads or aerial spraying would be utilized. Spraying would also be halted during unfavorable windy conditions to ensure that drift would not occur (See Section 2.1.5: *Conservation Measures*). As a result, the effect on air quality, if any, caused by the application of the herbicides, as proposed, would be minimal, short-term, and localized (USFS 1997).

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

Alternative B (the proposed action without herbicides on NFS lands) would have similar effects on the air quality of the project area as the Proposed Action discussed above in relation to exhaust from engines and dust, and herbicides on private land. Alternative B would have no effect to air

quality in relation to herbicides on NFS lands because herbicides would not be utilized on such lands as part of Alternative B.

3.9.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Air Quality within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Air Quality.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the project as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to air quality. As outlined above, reconstruction, operation, and maintenance of the transmission line would not increase fugitive emissions, and any effects from engine exhaust, fugitive dust, or herbicide application would be negligible to nonexistent. Additionally, any effects to air quality caused by the proposed action would be short-term, only lasting through the construction phase of the project.

The other activities identified above also have short-term impacts to air quality (dust and exhaust from vehicles, chainsaws, etc.). Potential effects on air quality associated with other activities could result from private residential/agricultural activities, ROW and trail maintenance, timber harvest, oil and gas and utility development in the area; however, these effects would also be temporary in nature. Therefore, it is unlikely the short-term incremental air quality effects of the proposed action would interact with the minimal effects of these other past, present, and reasonably foreseeable future actions in the area to produce cumulatively significant effects on air quality. It is anticipated air quality within the project area would return to ambient conditions once construction is complete, as outlined in Section 3.9.3: *Environmental Consequences* above.

3.10 Water Quality

3.10.1 Introduction

The proposed project is located within the Upper Cumberland River Basin, which flows westward through southeastern Kentucky, shifts southward into northeastern Tennessee, then shifts northward again through Lake Barkley in western Kentucky and empties into the Ohio River. The Cumberland River and other major perennial streams including Bridge Fork, Laurel Creek, Marsh Creek, Jellico Creek, Youngs Creek, Blake Fork and Watts Creek are shown on the *Stream Crossing/Wetland Avoidance Maps 1 – 4,* included in Exhibit B – *Project Maps*, Pg. 79.

The area of influence for water quality was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). In addition, the area of influence was further assessed using the USGS Hydrologic Unit system. The Hydrologic Unit system is a standardized watershed classification system developed by the USGS in the mid-1970s. The U.S. is divided

and sub-divided into successively smaller hydrologic units, which are classified into levels. The hydrologic units are arranged within each other, from the largest geographic (regions), to the smallest units (subwatersheds). Each hydrologic unit is identified by a unique hydrologic unit code (HUC) representing its level of classification in the hydrologic unit system.

The proposed project is located within portions of numerous 14 digit HUCs:

- 05130101-420-020, Bridge Fork
- 05130101-420-040, Bridge Fork
- 05130101-420-010, Laurel Creek
- 05130101-420-070, Laurel Creek
- 05130101-420-080, Wright Branch
- 05130101-410-130, Marsh Creek
- 05130101-370-180, Cumberland River
- 05130101-370-260, Jacks Creek
- 05130101-370-150, Peter Branch
- 05130101-370-160, Cumberland River
- 05130101-370-140, Cumberland River
- 05130101-370-290, Jellico Creek
- 05130101-370-110, Cumberland River
- 05130101-370-070, Cumberland River
- 05130101-370-050, Cumberland River
- 05130101-390-010, Youngs Creek
- 05130101-370-290, Cumberland River
- 05130101-370-040, Cumberland River
- 05130101-380-100, Blake Fork
- 05130101-380-090, Watts Creek
- 05130101-380-070, Watts Creek
- 05130101-380-080, Browns Creek

The project would have the potential to impact the water quality within these watersheds that drain the project area. The assessed AOI includes all areas that could be affected directly or indirectly by the proposed action with respect to water quality.

3.10.2 Affected Environment

In the western portions of the project area, the transmission line route traverses rugged topography with areas of cliffline habitat. This portion of the project area predominantly contains undeveloped mature forested habitat, on NFS lands, with only a few scattered rural residential private inholdings present. The eastern half of the project area exhibits extensive broad valleys and gently rolling hills, largely associated with the project proximity to the Cumberland River. Due to the relatively flat topography, and private ownership, this eastern portion of the project area has a long history of agricultural use. Moving to the east from the Jellico Creek crossing, the existing line traverses a landscape of alternating forested ridgetops and open agricultural lands adjacent to the Cumberland River and associated floodplain areas. Along and to the east of Interstate 75, the

project area enters the northern city limits of Williamsburg, Kentucky and is primarily located within/adjacent to residential neighborhoods, private businesses, and agricultural lands.

As such, water resources in the area of influence are concentrated in the valley bottoms, occurring mainly in the alluvial zone bordering streams. Surface water is concentrated in perennial, intermittent, and ephemeral stream channels, many of which flow only during the wetter portions of the year.

3.10.2.1 Surface Water

The Commonwealth of Kentucky Energy and Environment Cabinet designates surface waters as having one or more specific uses for which the water quality must be protected. Several of the waters identified in the project footprint are designated as being a special water resource (*exceptional water*), Outstanding Resource Waters, Cold Water Aquatic Habitats, or Reference Reach waters, as described in Section 3.4: *Jurisdictional Waters of the U.S.* Several additional streams in the area of influence are classified as warm water aquatic habitat, primary contact recreation, secondary contact recreation, and/or domestic water supply.

Waters of the Commonwealth within the proposed project area that would be spanned by the proposed project consist of and numerous intermittent streams and larger perennial streams and rivers including, but not limited to, Bridge Fork, Laurel Creek, Marsh Creek, Jellico Creek, the Cumberland River, Youngs Creek, Blake Fork, and Watts Creek. As a result, there is a potential for degradation of these or other downstream waterbodies due to stormwater discharges from construction-related activities within the project area.

To protect the water quality of the area, EKPC will apply for and follow the requirements of the Kentucky Pollutant Discharge Elimination System General Permit for Stormwater Discharges Associated with Construction Activities (KYR10) from the KDOW. As required by the permit, EKPC will submit an electronic Notice of Intent to the KDOW and prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) prior to the start of construction. The goal of this plan is to implement BMPs, which would include appropriate and adequate erosion prevention measures, sediment control measures, and other site management practices necessary to manage stormwater runoff during the construction period. These practices are aimed primarily at controlling erosion and sediment transport, but also include controls such as good housekeeping practices aimed at other pollutants such as construction chemicals and solid waste. Furthermore, EKPC is committed to minimizing water quality degradation of any sensitive streams or downstream waterbodies due to stormwater discharges from construction-related activities by implementing enhanced BMPs within the critical areas of these sensitive stream crossings. The plan describes the site management practices that will be utilized in order to effectively minimize such discharges for storm events up to and including a 2-year, 24-hour event. On NFS land these measures would meet the standards outlined in the USFS's *Forest Plan* that are designed for the protection of soil and water resources. When *Forest Plan* standards exceed Kentucky BMPs or water quality standards, *Forest Plan* standards shall take place.

The BMPs outlined in the SWPPP will be employed and maintained on site as recommended

by the KDOW, and will be inspected as required by the permit to ensure the BMPs are functioning effectively and preventing impacts to the surrounding environment. After construction activities have ended, all disturbed areas will be seeded and covered and all BMPs will be removed once the areas are stabilized and revegetated. EKPC would then send a Notice of Termination to the KDOW to end coverage of the general permit. By initiating these measures, it is not anticipated the project would have any adverse impacts on the water quality or aquatic resources of Waters of the Commonwealth.

3.10.2.2 Groundwater

As discussed in Section 3.2.2.2: *Hydrogeology*, most wells drilled in the valley bottoms in the region of the project produce enough water for a domestic supply. In McCreary County, most wells drilled on hillsides are adequate for a domestic supply and about half of the wells drilled on hilltops and ridges are adequate for domestic needs. Whitley County generally has lower groundwater availability, with fewer than half of the wells drilled on hillsides adequate for domestic supply, and wells on ridges yielding smaller quantities of water. In both counties, deep wells penetrating more than 500 feet of sandstone may yield enough water for small utilities or industrial supplies. Throughout Whitley County and most of McCreary County, most springs yield less than 5 gallons per minute (Carey et al. 2006a and Carey et al. 2006b).

The Kentucky Groundwater Data Repository, accessed through the Kentucky Geologic Map Information Service, was reviewed including active, inactive, and decommissioned wells and springs in the vicinity of the project. No springs were identified within the vicinity of the project footprint, but several wells are present in the vicinity and include both domestic wells and wells classified as an "other" type. Domestic water sources, such as wells and spring boxes, have not been field identified at the time of this writing due to posted lands and inaccessibility; however, these sources would be identified prior to the initiation of construction activities (KGS 2020).

3.10.3 Environmental Consequences

The direct and indirect effects of the proposed action on water quality would be anticipated to be limited to the confines of the area of influence, which was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW).

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The direct and indirect effects of the proposed action on water quality would be anticipated to be limited to an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). The proposed construction activity associated with the Proposed Action would not have any direct effects on rivers and streams. All of the water courses involved would be spanned by the proposed transmission line with no support poles placed within the channels, and none of the construction access roads would cross any rivers or perennial streams.

3.10.3.1 Surface Water

The proposed disturbances associated with the Proposed Action could potentially increase nutrients, storm flows, and sediment loading of streams and could impact groundwater within the project area. Generally, the amount of increase depends on the degree of disturbance, the

topography of the area, type of soil involved, and measures implemented to limit discharges (i.e. BMPs, etc.). EKPC estimates that fifty percent of the proposed access roads (length and/or width) would require new ground disturbance, which would result in roughly 15.9 acres of disturbance within the 16.6 miles of proposed access roads for the project. Additionally, EKPC estimates an average of 0.04 acre of disturbance at each of the 151 proposed structure locations, which would result in just over six acres of disturbance along the 20.7 mile long project area. Therefore, the proposed project is expected to result in approximately 22 acres of temporary ground disturbing activities during construction. These disturbances would be spread over a 20.7 mile linear project area and a two year anticipated construction timeframe.

Surface water run-off and erosion of soil from construction operations would be controlled by utilizing temporary sediment controls (silt fences, rock check dams, seed, mulch, erosion blankets, and revegetation. This combination of BMPs has shown to be an effective method for similar linear construction activities to reduce or eliminate sediment and other potential contaminants from reaching the receiving stream. Although numerous streams within the area of influence are designated as exceptional water resources, impacts to water quality in these streams are not anticipated due to avoidance (spanning) of these streams and the enhanced stormwater BMPs that would be utilized within critical areas during construction. Critical areas have been identified by the KDOW as those areas within 50 feet of waters designated as Outstanding State Resource Waters, and on a positive slope toward the water of the Commonwealth. Because the project area crosses the receiving waters, some activities may be required within the critical areas of these waters. Any required disturbances in critical areas will be controlled using adequately protective alternative devices including, but not limited to, covering with turf mats/erosion control blankets, mulch, or straw, stabilization with tackifiers or by track treading within 24 hours or "as soon as practicable" after completion of disturbance activities. Methods of cover, stabilization, and sediment control in critical areas will be determined on a case by case basis by the construction contractor, EKPC project inspector, or another qualified person. Unless infeasible, natural buffers will be provided and maintained around these receiving waters, stormwater will be directed to vegetated areas, and infiltration of stormwater will be maximized to reduce pollutant discharges. Minimizing siltation and maintaining the appropriate buffer strips would preserve these stream segments and no significant impacts are anticipated.

The DBNF uses the *Watershed Condition Rank* developed by the USFS, Southern Region, to quantify stream sedimentation within the forest. Watersheds within the DBNF fall either into the *excellent* or *average* category for stream sedimentation. The Proposed Action could have a small potential for water quality degradation of the river and streams due to the erosion of soils in association with water runoff from the construction sites. However, as described in Section 2.1.*3 Construction Procedures*, EKPC would incorporate Kentucky Best Management Practices (BMPs), as well as other erosion control techniques, to aid in preventing non-point source pollution, and control stormwater runoff and sediment damage to water quality.

There are no municipal water intakes located within the project area. The intakes for the communities of Whitley City and Williamsburg are located more than 1.5 miles to the south (upstream) of the project area. The entire project area is located within the Source Water Zone III (excluding the easternmost terminus located outside of this zone) for these municipal water intakes, which indicates zone of potential impact. Due to the distance from and down gradient

location, the proposed project would not have the potential to affect water quality within the municipal water intake drainages. Therefore, it is not expected that the project would have any major influence on any of the drainages, change the drinking water, or affect ground water.

The Proposed Action would have the potential to affect water quality within the project area from herbicides used within the ROW entering surface or groundwater during maintenance operations associated with the proposed transmission line ROW. The mobility of an herbicide and its persistence affects the herbicide's potential entry into water resources. Mobility depends on the herbicide's water solubility and ability to bond to soils (USFS 1989). Herbicides could enter rivers and creeks during treatment by direct application or drift, or within water runoff after treatment. The risk of herbicides entering surface water by direct application would be low because the herbicides would only be manually ground applied. The applicators have great control over where herbicides are being applied during ground applications, and would not apply herbicides directly to surface waters. The use of vegetation buffer strips is recognized as an effective mechanism to aid in guarding against herbicides within rainwater runoff from affecting water quality. Research has shown that surface water quality can be protected from ground applications of herbicides through the use of vegetation buffer strips of 25 feet in width or more (USFS 1997). Forest Plan direction requires herbicide application stop at least 30 feet from standing water.

For the Proposed Action, potential effects to water quality from herbicide application would be reduced by adhering to the following *Forest Plan* Standards.

DB-VEG-8 – Herbicides will be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting human and wildlife health. Application rate and work time must not exceed levels that pose an unacceptable level of risk to human or wildlife health. The Forest Service, southern Region standard for acceptable level of risk requires a Margin of Safety (MOS) > 100 or, Hazard quotient (HQ) < 1.0.

DB-VEG-9 - Monitor weather and suspend project if temperature, humidity, or wind becomes unfavorable according to the criteria below:

Ground:	Temperatures Higher Than (°F)	Humidity Less Than (%)	Wind (at Target) Greater Than (MPH)
Hand (cut surface)	n/a	n/a	n/a
Hand (other)	98	20	15
Mechanical (liquid)	95	30	10
Mechanical (granular)	n/a	n/a	10

DB-VEG-10 – Use only nozzles that produce droplets (mean droplet size of 50 microns or greater) or streams of herbicides. Nozzles that produce fine droplets may be used only for hand treatment, where distance from nozzle to target does not exceed eight feet.

DB-VEG-19 – No herbicide shall be applied within 30 horizontal feet of lakes, wetlands, perennial or intermittent springs (seeps) and streams. However, herbicides approved for aquatic use may be used when such treatment is required to control invasive plants.

DB-VEG-20 – Necessary buffer zone areas must be designated before making herbicide treatments so applicators can easily recognize and avoid the buffer area.

DB-VEG-21 – Herbicide mixing, loading, or cleaning areas in the field are not to be located within 200 feet of open water or wells, or other sensitive areas.

DB-VEG-27 – Resource management activities that may affect soil and/or water quality must follow applicable Kentucky Rules and Regulations for Water Quality Control and Kentucky's BMPs for Forestry as a minimum to achieve soil and water quality objectives. When Forest Plan standards exceed Kentucky BMPs or water quality standards, Forest Plan will take precedence.

5C-VEG-2 – Pesticide use is not allowed in Zone 1 except where necessary to control the spread of insect or disease outbreaks.

1.E-VEG-2 – All motorized equipment must be serviced outside of riparian corridors.

Additionally, EKPC would not apply herbicides within 100 feet of any well, spring box, or other source of public water supply.

On private lands within the project area, maintenance activities would include U. S. Environmental Protection Agency (USEPA) approved herbicides applied at USEPA approved rates and application methods by licensed applicators. The herbicide label directions would also be strictly followed to aid in preventing water quality contamination and these chemicals would be applied infrequently in relatively small quantities. As a result, the use of herbicides to maintain the proposed electric line ROW would not have any measurable effects on the surface water resources of the project area.

3.10.3.2 Groundwater

Groundwater could be affected by herbicide application as part of the Proposed Action through the vertical seepage of herbicides into aquifers. However, in addition to the 30-foot buffer requirement described above, EKPC would prohibit herbicide application within 100 horizontal feet of any public or domestic water source. Through the implementation of these mitigation measures the risk to groundwater would be minimal because the buffers would reduce herbicide concentrations through mixing and dilution (USFS 1989). Additionally, due to these herbicides strong adsorptive characteristics, they are not likely to migrate into the groundwater.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

Alternative B (the proposed action without herbicides on NFS lands) would have similar effects on the water quality of the project area as the Proposed Action discussed above in relation to stormwater runoff and sedimentation. However, Alternative B would have no effect to water quality in relation to herbicides within the DBNF because herbicides would not be utilized on NFS lands as part of this alternative.

3.10.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. As discussed in Section 3.8.4, other actions identified through this assessment that would also involve the use of herbicides, include the USFS treatment of NNIPS and to prepare native pollinator habitat sites for plantings. It is estimated that these herbicide uses would involve no more than 150 acres per year on the SRD. There were no other actions identified through this assessment that could measurably impacted Water Quality within the project area.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the project as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above are not expected to have significant effects on water quality due to stormwater management practices that would be implemented. It is anticipated that any effects to streams or other waters by other projects in the identified area of influence have been or would be permitted and adequately mitigated as required under the CWA. The mitigation of impacts would result in only minor impacts to water quality from the other activities identified. As outlined in Section 3.10.3: *Environmental Consequences* indirect effects, such as sediment loading, impacts from herbicides, etc., if any, would be negligible given the mitigation measures described in Sections 2.1.3: *Construction Procedures* and 2.1.5: *Conservation Measures*. For the Proposed Action, herbicide applications would be tracked by the USFS through annual Pesticide Use Proposals, which are required to ensure herbicides use is monitored and measured to prevent the risk of excess use of various chemicals. Furthermore, the proposed application methods (low-volume, selective herbicide treatment by licensed applicators), occurring every three to five years, would further reduce the potential for cumulative effects when considered in combination with the USFS herbicide uses. Therefore, because the proposed action will have little or no direct or indirect impact on water quality in the project area, it is unlikely those effects would interact with, or contribute to, the effects of other actions within a relative small portion of the area to produce cumulatively significant effects on water quality.

3.11 Transportation

3.11.1 Introduction

This section describes the affected environment and environmental consequences as they apply to transportation. The area of influence for transportation was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). The work associated with the proposal (i.e. access road construction, existing structure removal, new structure installation, vegetation control, etc.) would predominantly occur within the existing ROW.

3.11.2 Affected Environment

Major roads within the area of influence include US Highway 27 at the western terminus of the project, KY 478 which is crossed by the project in several locations in the western and central portions of the project corridor, KY 204 which crosses the Cumberland River, and three roads located near the eastern terminus: Interstate-75, US Highway 25W, and KY 26.

As discussed in Section 2.1.1: *Project Components*, access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. Roughly 16.6 miles of access roads, which would be approximately 15 feet in width, would be improved or constructed for the construction and maintenance of the transmission line. These access roads would cross approximately 5.6 miles of private land, involving approximately 11.7 acres, and approximately 11.0 miles of NFS land,

involving approximately 20.0 acres. Once construction of the proposed transmission line is completed, the new access roads on NFS land would be closed to the public by means of keyed gates placed at the entrance of the roads to block public access and to allow for the future maintenance of the line or otherwise blocked (e.g. bermed) to prevent access. On private land the new access roads would be closed or left open according to the direction of the landowners involved.

The Kentucky Transportation Cabinet's (KYTC) *6-year Highway Plan* Fiscal Year 2016 – 2022 lists two ongoing and/or proposed construction projects within the area of influence. The KYTC plans to install guardrail on KY 478 in the vicinity of Peter Branch, which is located in the central portion of the project corridor. The KYTC is also planning to install guardrail on four sections of KY 26 near the western terminus of the project. There are several other road or highway projects outlined for McCreary and Whitley Counties in the KYTC *6-year Highway Plan,* but these lie outside the area of influence.

The proposed reconstruction of the transmission line will not require notification to the Federal Aviation Administration (FAA) due to structure heights, because none of the structures associated with the facility will exceed the 200 feet above-ground height notification requirements of the FAA.

The McCreary County Airport is a public, single-runway facility, which is located approximately 1.5 miles south of the project centerline and approximately four miles east of the western project terminus at Whitley City. In addition, the Williamsburg-Whitley County Airport is a public, single-runway facility, located north of the project approximately 1.75 miles west of I-75 in the eastern portion of the project area. The grounds of the airport are overlapped at the southern end by the area of influence. EKPC coordinated with Mr. John Houlihan, Administrator, Kentucky Airport Zoning Commission (KAZC), via emails dated April 12, 2019 regarding the proposed project with respect to the horizontal surface and elevation of the two airports to ensure all applicable regulations are met. Mr. Houlihan responded that no permits would be required for the project from the KAZC. Therefore, the proposed project would have no significant adverse impacts on navigable airspace. A copy of the email correspondence with Mr. Houlihan is included in Exhibit D – *Agency Correspondence*, Pg. 143.

3.11.3 Environmental Consequences

The direct and indirect effects of the proposed action on transportation would primarily be limited to the area of influence (750 feet on either side of the existing ROW).

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The construction of the proposed electric transmission line could temporarily increase traffic within the project area through the movement of construction vehicles along the transmission line route. However, this increase in traffic would be temporary and would return to normal upon completion of construction activities. Maintenance of the proposed transmission line every three to five years would not be expected to have any impact on traffic flows or patterns within the project area.

The construction of the proposed transmission line could also have a temporary effect on transportation in the project area through temporary road closures. During the reconstruction of the line the electrical conductor would be strung on the support structures using a pulley system and/or helicopter, or with a tensioner mounted on the back of a digger/derrick truck. At the proposed transmission line crossings some of the roads may have to be temporarily closed for safety purposes during the stringing of the electrical conductor onto the support structures. These road closures could range in duration from the halting of traffic for minutes to temporary closing the road for up to four hours based on the width of the road and the complexity of the crossing. These temporary road closings would not be expected to have any major impacts on transportation in the area because once the crossing is completed the road would be reopened, and traffic flows and patterns would return to normal. Additionally, with the exception of the proposed crossings of Interstate-75 and US Highway 25W at the eastern end of the proposed route, the road crossing would involve the crossing of light-duty roads that are not subject to high concentrations of vehicular traffic. EKPC would coordinate the proposed transmission line construction with the Kentucky Transportation Cabinet and would secure all the required permits for the road crossings.

As discussed in Section 3.4*: Waters of the U.S*, the Cumberland River is recognized as being navigable. The crossing of the river by the proposed transmission line is not expected to have any major impact on river transportation. The river is not used for commerce and the halting of river traffic, if any, during the construction of the line would involve very small pleasure craft, such as a canoe, rowboat, or small fishing boat. Should any river traffic need to be halted, it would be temporary and would resume once the stringing of the conductor over the river crossing is completed. Additionally, none of the other streams that would be crossed by the proposed transmission line are recognized as being navigable, and none are used for commerce. Therefore, the crossing of these streams by the proposed transmission line would not have any effect on transportation.

For the Proposed Action, potential effects relating to transportation would be reduced by adhering to the following *Forest Plan* Standards.

DB-ENG-4 – Restrict motorized vehicle use in the scour ephemeral stream zone to designated sites.

DB-VEG-1 – Hazard trees (dead or alive) considered to be an immediate threat to human safety may be removed anytime. This supersedes all other standards.

DB-VEG-3 – Logging or site preparation equipment, rubber-tired or tracked, is not to be used on plastic soils when the water table is within 12 inches of the surface or when soil moisture exceeds the plastic limit.

1.E-VEG-2 – All motorized equipment must be serviced outside of riparian corridors.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

Alternative B, the proposal without herbicides on NFS lands, would have similar effects on transportation taking place in the project area as the Proposed Action, only having temporary effects on transportation during construction activities.

3.11.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Transportation within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Transportation.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the project as outlined in the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to transportation. As outlined above, only minimal effects on transportation during the reconstruction of the proposed transmission line are anticipated and once completed, the effect on transportation would essentially be non-existent. The actions identified do not appear to result in large increases or disuse of transportation facilities. Because the proposed action would have little or no effect on transportation and because those effects are unlikely to interact significantly with the effects of the other actions identified, it is unlikely that the proposed action would have cumulatively significant effects on transportation.

3.12 Noise

3.12.1 Introduction

Noise-sensitive receptors are those that may be subject to stress or significant interference from noise. They often include residential dwellings, hotels, motels, hospitals, nursing homes, educational facilities, and libraries. Industrial, commercial, agricultural, and undeveloped land uses generally are not considered sensitive to ambient noise. Noise is often considered unwanted sound; however, response to noise is highly individualized and is influenced by both acoustic and non-acoustic factors. Acoustic factors include the sound's amplitude, duration, frequency content, and fluctuations. Non-acoustic factors include the listener's ability to become accustomed to the sound, the listener's attitude towards the noise and the noise source, the listener's view of the necessity of the noise, and the predictability of the noise. No state or county noise regulations have been identified that would be applicable to the proposed transmission line reconstruction project. Thus, the proposed project would conform to the requirements of the U.S. Department of Housing and Urban Development (HUD) as noted in this section.

The area of influence for noise was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). This buffer was considered a reasonable area that would encompass all potential noise-sensitive receptors in the vicinity.

3.12.2 Affected Environment

HUD has adopted environmental noise standards, criteria, and guidelines for determining acceptability of federally assisted projects and proposed mitigation measures that achieve the goal of a suitable living environment. The existing transmission line is in a relatively quiet rural area although the outskirts of the cities of Whitley City, Goldbug, and Wofford are overlapped by the

project's area of influence. This region of Kentucky is extremely remote and predominantly comprised of NFS Lands and there has been little, to no, private development in the western portion of the project area. Private residences and farm buildings are interspersed throughout the area, and are more common in the eastern portion of the project area on private lands, but no large commercial or industrial facilities are present. Public facilities within the area of influence include the McCreary Center of Somerset Community College, the Kentucky Consular Center, and a cluster of five Whitley County schools.

3.12.3 Environmental Consequences

The direct and indirect effects of the proposed action on noise would be anticipated to be within the approximately 1,500-foot corridor (750 feet on either side of the existing ROW).

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The direct and indirect effects of the proposed action on noise would be anticipated to be limited to the area of influence. The proposed construction activity associated with the Proposed Action would have a minor impact on noise levels in the immediate project impact area. Noise would emanate from chainsaws and machinery used during tree clearing activities. Noise would also be created by vehicles, machinery and equipment used during the physical construction of the proposed project. This increase in noise levels would be short-term and there would be an immediate return to ambient noise levels upon completion of construction activities. Additionally, all operational equipment would be specified and designed so as not to exceed the noise limits as required by HUD for off-site receptors. Maintenance of the proposed new line would only have a very minor impact, if any, on the noise levels of the area. Therefore, the proposed transmission line project should not produce any significant direct or indirect effects on the noise levels within the project area.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

Alternative B would have similar minor effects on the noise levels in the project area, as those levels described above for the Proposed Action.

3.12.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Noise within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Noise.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the Proposed Action or Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to local noise levels. As outlined above, only minimal, temporary, and localized effects on noise levels would be expected during construction of the proposed project, and once

completed, any such effects on noise levels would end. There could also be effects on noise caused by private residential/agricultural activities, ROW and trail maintenance, timber harvest, or oil and gas and utility development activities in the area; however, these effects would also be temporary in nature. Due to the temporary, localized nature of the production of noise from the various projects, including the proposed action, and the return to ambient conditions upon completion of projects, it is highly unlikely that the noise effects of the proposed action or any other action in the project would interact to produce cumulatively significant effects on noise.

3.13 Radio, Television & Cellular Phone Interference

3.13.1 Introduction

This section describes the affected environment and environmental consequences as they apply to radio, television, and cellular phone interference. The area of influence for radio, television, and cellular phone interference was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). This buffer was considered a reasonable area that would encompass all identified radio, television, and cellular phone issues in the vicinity.

3.13.2 Affected Environment

No radio, television, or cellular phone infrastructure is mapped within the area of influence on the USGS topographic map for the area. However, signals for radio, television, and cellular phones are emitted into the area of influence from infrastructure in the area surrounding the proposed project.

3.13.3 Environmental Consequences

The direct and indirect effects of the proposed action on transportation would primarily be limited to the area of influence (750 feet on either side of the existing ROW).

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The direct and indirect effects of the Proposed Action on radios, televisions, and cellular phones would be anticipated to be within the vicinity of the project footprint. The Proposed Action should not have any effect on radio or television reception because electric transmission line equipment by design does not cause radio or television reception interference. The electric transmission line has been active since its construction circa 1952. The proposed project would replace the support structures but would entail only minor changes to the electric line and its operation.

The proposed rebuilt electric line is designed using RUS guidelines to minimize any impacts on communications in the area. The standard structures are designed to eliminate radio and television interference, which can be caused by improperly installed, loose, or damaged hardware. In addition, the proposed reconstruction project would not be expected to cause radio or television reception interference due to the rural nature of the proposed project area and the distance of houses from the existing transmission line route. Should EKPC receive a reception inference complaint it has a policy of investigating the source of the interference and taking steps to remedy the situation, such as replacing insulators, tightening hardware, etc., should the source of the problem be determined to be electric equipment associated with one of its electric facilities.

Mobile and automobile radios can lose signal strength directly underneath electric transmission lines, such as a loss of signal strength when traveling underneath a transmission line at a road or highway crossing. Cellular telephones can also lose signal strength directly underneath electric transmission lines when located in fringe areas of the cellular service companies. However, these are temporary, or momentary, losses of signal strength that have minimal effects on the use of mobile or automobile radio, or cellular telephone equipment.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
Alternative B, the proposal without herbicides on NFS lands, would have similar effects on radio, television, cellular telephone interference as described above for the Proposed Action.

3.13.4 Cumulative Effects
Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Radio, Television & Cellular Phone Interference within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Radio, Television & Cellular Phone Interference.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)
The effects of the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects to radio, television, and cellular telephone interference. The effects of the proposed action when considered with the effects of the other past, present, and future actions identified above would result in minimal cumulative effects on radio, television, and cellular phone equipment. As outlined above, the proposed action would only have negligible effects on radio, television, and cellular phone equipment. Other actions identified (road right of way and utility corridor maintenance etc.) do not typically cause interference with radio, television, or cell phone signals. It is unlikely that the incremental effects of the proposed action would interact with the effects of other past, present, and reasonably foreseeable future actions in the area to produce cumulatively significant effects on such equipment.

3.14 Human Health & Safety

3.14.1 Introduction
There is a commitment to safety by management of EKPC, and safe job performance is a Cooperative expectation for all employees and contractors. The area of influence for human health and safety was considered to be the project footprint: a 150-foot-wide corridor encompassing 75 feet on either side of the existing centerline and the access roads. This buffer was considered a reasonable area that would encompass all identified health and safety issues in the vicinity.

3.14.2 Affected Environment

EKPC provides the approved Personal Protection Equipment (PPE) for the protection of all employees. It is the employee's responsibility to use this equipment and the supervisor's responsibility to see that this equipment is used in accordance with the manufacturer's recommendations and all Occupational Safety and Health Administration (OSHA) Regulations. Training guidelines set forth by EKPC are applicable to all EKPC employees and are intended to emphasize that all employees would be trained in safety-related work practices, safe procedures, and other safety requirements, including those mandated by federal or state laws and by EKPC. Training is designed to provide information, to ensure understanding, and to apply/practice what is understood so that employees will be motivated to follow principles that protect their safety and health.

3.14.3 Environmental Consequences

The direct and indirect effects of the proposed action on health and safety would primarily be limited to the project footprint: a 150-foot-wide corridor encompassing 75 feet on either side of the existing centerline and the access roads.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line)

The clearing of vegetation associated with reestablishment of the existing ROW as described in the Proposed Action could have an effect on human health and safety. One common tool used for manually cutting and clearing vegetation in the electric utility industry is the chainsaw. The chainsaw can be one of the most dangerous hand cutting tools used and cuts caused by these tools can be encountered by crewmembers. Other hazards associated with chainsaw use include flying wood chips, sawdust and bar oil causing eye problems for workers. Another hazard associated with chainsaw use could be hearing loss if proper ear protection is not used. However, if the chainsaws are operated in a safe manner adhering to all state, local, and federal PPE safety rules (i.e. protective clothing, eyewear, and ear protection), injuries from chainsaws should not present a problem and no direct or indirect effects are anticipated.

Mechanical types of equipment used during construction activities, such as utility trucks, bulldozers and off road vehicles, could also pose a hazard to construction workers. This type of equipment could roll over when operated improperly on steep grades injuring the operator and any nearby crewmembers who happen to be in the way. Fire can also potentially be a hazard to operators attempting to refuel hot engines or when leaked oil or flammable debris is exposed to hot engines. However, operators would be trained in the safe operation of this kind of equipment. Hazards from the operation of such equipment should not pose a problem, and no direct or indirect effects are anticipated.

Emissions from the exhaust of chainsaws and mechanical equipment could result in exposing operators to a number of carcinogens known to be present in the exhaust of internal combustion engines, such as benzene, 1,3-butadiene, and numerous polynuclear aromatic hydrocarbons (USFS 1997). Exhaust from the engines also exposes equipment operators to carbon monoxide and neurotoxic hydrocarbons, as well as irritants, such as, formaldehyde, acrolein, and nitrogen oxides (USFS 1997). However, the effects to operators would be minimal because the components of exhaust are volatile and would move out of the immediate project area within a short period of time (USFS 1997).

Hazards to the general public could occur during vegetation clearing activities if individuals were to enter work areas while machinery is operating and the vegetation is being cut. Individuals of the public present on or near the work sites when the cutting operations are occurring could be struck by falling vegetation, flying wood chips, sawdust, etc. Stubble left on the ROW after cutting operations are completed can also present a hazard to the public by individuals tripping over or falling onto cut stumps and stubble causing injury. Recreational facilities within the project area are limited to the Laurel Creek Trail and the Ballard Ford Memorial River Access on the Cumberland River. The proposed reconstruction activities will be limited to the high ground far above Laurel Creek and little to no vegetation clearing is expected in the vicinity of the creek and trail due to their location far below the electric line. At the Cumberland River and the Ballard Ford Memorial River Access, construction activities will also occur far above the river. Therefore, the risk to the general public from ROW clearing operations would be negligible. This risk would not be present during the maintenance of the proposed ROW because the ROW would be maintained through the use of herbicides.

As discussed in Section 2.1.4.2: *Herbicides*, the Non-Restricted Use Herbicides, listed by their active ingredients, which are being proposed to aid in controlling vegetation growth on the proposed electric transmission line ROW include Aminopyralid, Imazapyr, and Triclopyr. These chemicals are approved for use as stipulated through labeling requirements by the U.S. Environmental Protection Agency (USEPA). Different formulations of the technical acids of each chemical are created to facilitate the ease of use and increase the efficacy of these products. These proposed herbicides currently have USFS risk assessments completed (*Aminopyralid, Imazapyr, and Triclopyr – Human Health and Ecological Risk Assessment – FINAL REPORTs*), and these assessments have been relied upon in lieu of a project-specific risk assessment. However, if herbicides are developed in the future that may be more suitable, (for example if they are more selective, are safer, allow the use of a lower quantity, are less expensive, are more effective for specific species), then they will be analyzed and may be added to the plan through a Supplemental Information Review (SIR) if they are determined to have the same or lesser effects.

The proposed chemical mixture of the herbicide would be water based with a soybean oil surfactant added to aid the herbicide in adhering to the plant foliage. The rate of herbicide application would be the lowest effective rate approved by USFS to meet the proposed objective. The maximum application rate for the proposed chemicals would be ten gallons of herbicide mix per acre.

The herbicides outlined for use in the Proposed Action would not have systemic or reproductive effects on any members of the general public, including sensitive individuals (USFS 1997). There is a very slight chance of a systemic effect should an individual drink from standing water into which concentrated triclopyr has been spilled (USFS 1997). However, the probability of an individual drinking from such a source is very low and normal operational procedures make such a spill extremely unlikely (USFS 1997). If an individual was sprayed directly there is also a slight chance of skin irritation and transient systemic effects (USFS 1997). The type of spraying being proposed is very localized with no long-range nozzle type spraying heads and no aerial type spraying. Therefore, it would be virtually impossible to accidentally spray a member of the public. Since the transmission line route is located in a rural area and recreational activities within the project area are limited to the Laurel Creek Trail and the Ballard Ford Memorial River Access on

the Cumberland River, and little to no vegetation maintenance is expected in the vicinity of these features, the risk of herbicide exposure to the general public from ROW maintenance operations would be negligible. Even though public health risks would be negligible, to mitigate against public exposure to the proposed herbicides on public land, treated areas would be posted as required in the *Forest Plan*.

For the Proposed Action, potential effects to health and safety from herbicide application would be reduced by adhering to the following Forest Plan Standards.

DB-VEG-8 – Herbicides will be applied at the lowest rate effective in meeting project objectives and according to guidelines for protecting human and wildlife health. Application rate and work time must not exceed levels that pose an unacceptable level of risk to human or wildlife health. The Forest Service, southern Region standard for acceptable level of risk requires a Margin of Safety (MOS) > 100 or, Hazard quotient (HQ) < 1.0.

DB-VEG-9 - Monitor weather and suspend project if temperature, humidity, or wind becomes unfavorable according to the criteria below:

Ground:	Temperatures Higher Than (°F)	Humidity Less Than (%)	Wind (at Target) Greater Than (MPH)
Hand (cut surface)	n/a	n/a	n/a
Hand (other)	98	20	15
Mechanical (liquid)	95	30	10
Mechanical (granular)	n/a	n/a	10

DB-VEG-11 – Areas treated with herbicides are to be clearly posted with noticed signs to warn visitors of the treatment.

Extremely low-frequency electric and magnetic fields (EMFs) surround high-voltage electric transmission lines and transformers, and are everywhere in the environment but are invisible to the human eye (WHO 2009). A good deal of attention has been focused on the possible health effects of EMFs since the 1970's. However, evidence of health effects from EMFs is inconclusive and the available information is not sufficient to establish a cause-effect relationship (National Safety Council 2002). Overall, the evidence that power line EMFs cause or contribute to cancer in humans is considered weak or nonexistent by most scientists (Moulder 2005). The U.S. National Institutes of Health concluded in 2002 that the overall scientific evidence for human health risk from EMFs is weak and that no consistent pattern of biological effects from exposure to EMFs has emerged from laboratory studies (Moulder 2005). Over the past 30 years approximately 25,000 articles have been published on the health effects associated with EMFs and based on a recent in-depth review of the scientific literature, the World Health Organization (WHO) concluded that current evidence does not confirm the existence of any health consequences from exposure to low level EMFs (WHO 2009). Additionally, the strength of EMFs quickly decreases as you move away from the source. Overhead transmission lines produce a magnetic field that peaks underneath the electric conductors and falls off rapidly with distance on either side. The proposed reconstruction project is located on a dedicated ROW where the line has been active since construction circa 1952. In addition, the proposed project is located in a rural area and is not located immediately adjacent to any residences or other occupied buildings. Consequently, no such structures would be located close enough to the proposed transmission line to experience increased EMF levels.

Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The cutting of vegetation from the proposed ROW as outlined in Alternative B, the proposal without herbicides on NFS land, would have a slightly greater potential effect on health and safety of workers during maintenance operations than that described above for the Proposed Action. The potential hazard to worker health and safety from the cutting equipment used to maintain the proposed ROW would be present during every cutting cycle, or every three to five years, on NFS land. Alternative B would not use herbicides to control vegetation on NFS land and, as a result, there would be no risk to health and safety by these types of chemicals on such lands.

3.14.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Human Health and Safety within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Human Health and Safety.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The effects of the Proposed Action and Alternative B when considered with the effects of the other past, present, and reasonably foreseeable future actions identified above would result in minimal cumulative effects in relation to the health and safety of workers or the general public. In the heavily forested portions of the project area the clearing of at least some vegetation would likely be required for the construction of the proposed project and all of the other activities identified. For all activities vegetation clearing would be short-term, lasting only through the construction phase of the project, and vegetation management for maintenance would only occur periodically every three to five years; therefore, it is unlikely that the incremental effects of the proposed action would interact with the effects of other past, present, and reasonably foreseeable future actions in the area to produce cumulatively significant effects on the health and safety of workers or the general public. Additionally, presuming equipment is operated in a safe manner adhering to PPE safety rules (i.e. protective clothing, eyewear, and ear protection) injuries to workers should not occur. Cumulative effects also would not be likely to workers or the general public as a result of maintaining the proposed project or other activities identified (if applicable) with herbicides because the herbicides in question are not persistent in the environment or the human body (USFS 1997).

3.15 Socioeconomics & Environmental Justice

3.15.1 Introduction

This section describes the affected environment and environmental consequences as they apply to socioeconomics and environmental justice. The area of influence for these issues was considered to be an approximately 1,500-foot corridor (750 feet on either side of the existing ROW). This

buffer was considered a reasonable area that would encompass all identified socioeconomic and environmental justice issues in the vicinity.

3.15.2 Affected Environment

The county seat of McCreary County is Whitley City. It is the largest city located in the county and is located adjacent to the western terminus of the proposed project. According to the U.S. Census Bureau, McCreary County had an estimated population of 17,231 in 2019. Since 2010, the population has decreased by 5.9%, which is significantly lower that the growth rate experienced across the Commonwealth of Kentucky (3.0%). The population in McCreary County is predominantly white at 91.67%, with the small minority population composed of African American, Native American, Asian, and Hispanic.

The county seat of Whitley County is Williamsburg, but the largest city in the county is Corbin. According to the U.S. Census Bureau, Whitley County had an estimated population of 36,264 in 2019. Since 2010, the population has increased by 1.8%, which is slightly lower than the 3.0% growth rate experienced across the Commonwealth of Kentucky. The population in Whitley County is predominantly white at 96.9%, with the small minority population composed of African American, Native American, Asian, and Hispanic.

Minorities comprise a very small percentage of the population in the identified area of influence, much smaller than the statewide minority population of 12.4%. The unemployment rate in McCreary and Whitley Counties in March 2019 was 7.2% and 5.5%, respectively. This was higher than the state and national unemployment rates for the same time period, which were 4.3% and 3.7% respectively. The percentage of persons living below the poverty line in McCreary and Whitley Counties in 2018 was 33.7% and 25.7% respectively, which was higher than the United States average of 11.8%.

3.15.3 Environmental Consequences

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

Neither project alternative should not have any change on the population or economy of the area. Based upon the small size of the project and location within this rural area, it is believed that no new jobs would be created or that unemployment rates for the area would be impacted by the project. Although, the proposed project would ultimately have a beneficial effect on the community as a whole by increasing electric service reliability to property owners in the project area by making electrical service more dependable. Additionally, none of the proposed electric facilities would be located through any high-density residential areas and none would be located in minority or low-income areas. As a result, the alternatives investigated would not have any disproportionate effects on populations located in such areas. The alternatives investigated also would not have any impact on, or be influenced by, the civil rights, ethnic origin, sex or social status of people living within the proposed project area.

3.15.4 Cumulative Effects

Other activities and projects considered to be past, present, or reasonably foreseeable within the project area that could cause implementation of the Proposed Action or Alternative B to have a cumulative effect are listed above in Section 3.0. There were no other actions identified through this assessment that have measurably impacted Socioeconomics & Environmental Justice within the project area, and these actions when added to the actions of the proposed transmission line reconstruction project would not measurably impact Socioeconomics & Environmental Justice.

Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) and Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on National Forest System Lands)

The proposed project is needed to reduce the risk associated with electrical outages and to improve electric service reliability to consumers in this region of the state. The project was not designed to stimulate growth or create industry. The project supports the existing needs of the communities involved. As discussed above, The Proposed Action and Alternative B would not have any negative effects on the population or the economy of the area. The other actions identified do not appear to result in disproportionate effects to a race, group of national origin, or income class. Therefore, the proposed action would not interact with the effects of other actions in the area to produce cumulative socioeconomic or disproportionate environmental justice effects to low income or minority populations.

4.0 SCOPING AND PUBLIC INVOLVEMENT

The USFS went through a 30 day notice and comment period concurrent with the scoping process that began with the publishing of the proposed action on the Forest Service website (*https://www.fs.usda.gov/project/?project=56083*) and also involved a June 3, 2019 mailing of the same detailed project description and maps to two addresses. The mailing list was compiled from lists that are maintained at the SRD office of the DBNF of interested individuals, agencies, and organizations, Tribal Historic Preservation Officers, and political leaders. This information regarding the proposed project was also sent to 66 e-mail addresses. The purpose of the mailings was to inform the public of the proposed project and to request comments regarding the project. The USFS also placed a legal notice in the newspaper of record for the project area, the *McCreary County Voice*, on June 6, 2019. The notice contained a brief description of the proposed project and location, described where detailed information regarding the proposed project could be obtained, and requested comments on the proposed project within 30 days.

The scoping process undertaken by the USFS resulted in one comment received via email on June 13, 2019. The commenter requested clarification that the proposed project is the entire line but the proposed USFS action is only on NFS lands, further description of existing roads, how roads will be closed, actions for building new access roads, USFS road management level, and clarification on Pesticide Use Proposal requirements. The USFS did not identify any significant issues, with the comments primarily focused on verbiage used in the project description. These comments have all been addressed in the current project description in this EA, see Exhibit C – *Public Notice*, Pg. 129.

In addition to the federal scoping process outlined above, and in accordance with Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800) EKPC conducted a public notice regarding the project. This entailed notification to the local government officials that have primary land use jurisdiction over the site of the proposed project and written notice to the public of the proposal through the local newspapers of general circulation in the project area. Through June 7, 2019 mailings, EKPC notified the Whitley County Judge Executive, Mr. Pat White, Jr. and the McCreary County Judge Executive, Mr. Jimmie W. Green II of the proposal and requested that they contact EKPC should they want to be formally involved in the regulatory process as a consulting party. EKPC also ran public notices in the *Whitley Republican – News Journal* and the *McCreary County Voice*, newspapers local to the project area, in August 2019, requesting that anyone interested in the project contact EKPC. No responses were received from either of the Judge Executives or to the newspaper notices. Copies of all public notice related correspondence are included in Exhibit D – *Agency Correspondence*, Pg. 143.

The U.S. Fish and Wildlife Service, Kentucky Field Office (USFWS) in Frankfort, KY was consulted on the project and they provided information concerning federally listed species. Specifically, the USFWS provided comments concerning the results of the presence/absence mist netting survey conducted for the proposed project. EKPC submitted the results of the survey for comment on November 27, 2019 in a report prepared by EKPC's consultant Redwing Ecological Services, Inc., entitled *Indiana and Northern Long-eared Bat Survey Report, McCreary County Junction – KU Wofford 69 kV Transmission Line Project, McCreary and Whitley Counties,*

Kentucky. After reviewing the report, the USFWS responded via letter dated December 16, 2019 regarding the results of the survey and provided their comments on potential project impacts to federally listed bat species. The USFWS also reviewed a Biological Assessment for the project and by letter dated August 21, 2020, concurred with EKPC's findings that the proposed project is not likely to jeopardize/adversely affect the evaluated species, see Exhibit D – *Agency Correspondence*, Pg. 143.

The OKNP was contacted on March 4, 2020 to determine if any rare or federally threatened or endangered species were known from the area investigated for the proposed McCreary County – Wofford Transmission Line Project.

4.1 Agencies Consulted

Kentucky Airport Zoning Commission, Frankfort, Kentucky

Kentucky Division of Water, Frankfort, Kentucky

Kentucky Heritage Council, State Historic Preservation Office, Frankfort, Kentucky

Office of Kentucky Nature Preserves, Frankfort, Kentucky

Natural Resources Conservation Service, Mayfield, Kentucky

U.S. Army Corps of Engineers, Nashville, Tennessee

U.S. Fish and Wildlife Service, Kentucky Ecological Services Field Office, Frankfort, Kentucky

5.0 CONCLUSION

EKPC has applied to the Daniel Boone National Forest to reconstruct its McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section. The USFS will use this EA to help determine whether or not to authorize the reconstruction of the transmission line, and whether or not to include in the authorization the use of herbicides to maintain and control vegetation along the powerline right-of-way (ROW). This section of line is roughly 20.7 miles in length, and was one of EKPCs first transmission lines constructed and is nearly 70 years old. Due to reliability concerns associated with the deteriorating physical condition of the existing facility, EKPC has identified the need to rebuild this line section as the most cost effective long-term solution. The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide ROW easement. Based on the engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet.

EKPC identified the Proposed Action (Rebuild, Operate, and Maintain Electrical Transmission Line) as the least environmentally damaging practicable alternative through an analysis of multiple alternatives. Alternative B (Rebuild, Operate, and Maintain Electrical Transmission Line without Herbicide on NFS Lands) was also evaluated. Herbicide activities under the Proposed Action are subject to the DBNF *Forest Plan,* which establishes standards, or requirements, that impose limitations on management activities to protect resources or public safety on NFS lands. These standards would minimize the direct and indirect effects on natural resources from herbicide use. Compared to Alternative B, the Proposed Action would provide more effective control of woody vegetation within the ROW and would require less frequent maintenance intervals. Through this process, numerous BMPs and conservation measures were designed to avoid impacts to federally listed species, vegetation, jurisdictional waters, and cultural resources and limit impacts to natural habitats while providing the needed improvement and maintenance of the electric transmission line and associated ROW.

LITERATURE CITED

Beverly, Jr., Howard, and Heather D. Barras. 2019. *An Archaeological Survey of the proposed McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line Rebuild in Whitley and McCreary Counties, Kentucky*. Cultural Resource Analysts, Inc., Lexington, Kentucky.

Byrne, James G., Craig K. Losche, Charles R. Gass, G. Dean Bottrell, Peter E. Avers, John K. Long, and Lewis G. Manhart, U.S. Forest Service. 1970. Soil Survey of the McCreary-Whitley Area, Kentucky. United States Department of Agriculture, Forest Service and Soil Conservation Service in cooperation with Kentucky Agricultural Experiment Station.

Campbell, Julian and Max Medley. 2014. The Atlas of Vascular Plants in Kentucky. Draft of Jan. 2014. Online document and database, available at http://bluegrasswoodland.com/ [Accessed 6/1/20]

Carey, Daniel L., Bethany L. Overfield, and Randall L. Paylor. 2006a. Generalized Geologic Map for Land-Use Planning: Whitley County, Kentucky. Kentucky Geological Survey, University of Kentucky. Map and Chart 141, Series XII.

Carey, Daniel L., Randall L. Paylor, and Bethany L. Overfield. 2006b. Generalized Geologic Map for Land-Use Planning: McCreary County, Kentucky. Kentucky Geological Survey, University of Kentucky. Map and Chart 144, Series XII.

Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Division of Air Quality. 2019. Kentucky Ambient Air Monitoring Network Plan 2019.

Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Division of Air Quality. 2019. Kentucky's Air, FY2019 Annual Report.

Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Division of Water. 2020a. Kentucky *Special Waters Listing*. January 3, 2020.

Commonwealth of Kentucky Energy and Environment Cabinet, Department for Environmental Protection, Kentucky Division of Water, Water Quality Branch. 2020b. Kentucky Water Health Portal. Online viewer. Available at https://watermaps.ky.gov/WaterHealthPortal/ [Accessed May 26, 2020.]

Condo, Tim. 2019. *Cultural Historic Survey for the Proposed McCreary County Junction – Kentucky Utilities Wofford 69 kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky*. Contract Publication Series 19-389. Cultural Resource Analysts, Inc., Lexington, Kentucky.

Cotton, Claudia, David Taylor, and Kevin Beck. 2020. United States Department of Agriculture (USDA), Forest Service (USFS). Daniel Boone National Forest. Soil and Water Protection Measures for Timber Sales. September 2020. 5 pp.

Council on Environmental Quality. 1978. Regulations for Implementing NEPA.

Durkin, Patrick R. 2007. *Aminopyralid, Human Health and Ecological Risk Assessment – FINAL REPORT*. Syracuse Environmental Research Associates, Manlius, NY. June 28, 2007.

Durkin, Patrick R. 2011. *Imazapyr, Human Health and Ecological Risk Assessment – FINAL REPORT*. Syracuse Environmental Research Associates, Manlius, NY. December 16, 2011.

Durkin, Patrick R. 2016. *Triclopyr, Human Health and Ecological Risk Assessment, Corrected Final Report*. Syracuse Environmental Research Associates, Manlius, NY. July 9, 2016 (Corrections).

Jones, R. L. 2005. *Plant Life of Kentucky*. University Press of Kentucky. Lexington, Kentucky.

Kentucky Geological Survey, University of Kentucky. 2020. Kentucky Geologic Map Information Service. Available at https://kgs.uky.edu/kgsmap/kgsgeoserver/viewer.asp. [Accessed May 18, 2020.]

Kentucky Transportation Cabinet (KYTC). Active Highway Plan Map. Interactive map of the approved Six-Year Highway Plan. Available at https://maps.kytc.ky.gov/activehighwayplan/ [Accessed June 8, 2020].

McGrain, P. and J. C. Currens. 1978. *Topography of Kentucky*. Kentucky Geological Survey, Ser. X, Special Pub. 25, University of Kentucky, Lexington, KY.

Metzmeier, Joe. 2016. United States Department of Agriculture (USDA), Forest Service (USFS). Stearns Ranger District, Daniel Boone National Forest. Greenwood Vegetation Management Project, Wildlife Resource Report. Updated October 25, 2017. 83 pp.

Miller, James H. 2003. United States Department of Agriculture (USDA), Forest Service (USFS). *Nonnative Invasive Plants of Southern Forests, A Field Guide for Identification and Control.* Revised. Gen. Tech. Rep. SRS–62. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 93 p.

Moulder, John E., Ph.D., Professor of Radiation Oncology. 2005. *"Electromagnetic Fields and Human Health."* Medical College of Wisconsin.

National Safety Council. 2002. *"Understanding Radiation, Sources of Nonionizing Radiation."*

NatureServe Explorer. 2020. NatureServe Explorer 2.0: An online encyclopedia of life [web application]. Version 4.0. NatureServe, Arlington, Virginia. Available https://explorer.natureserve.org/. (Accessed: February-April 2020).

Office of Kentucky Nature Preserves. 2020. Kentucky Rare Plant Database [web Application]. Available http://eppcapp.ky.gov/nprareplants/ [Accessed June 26, 2020].

Redwing Ecological Services, Inc. September 9, 2019. *Indiana and Northern Long-eared Bat Survey Report, McCreary County Junction – KU Wofford 69 kV Transmission Line Project, McCreary and Whitley Counties, Kentucky*.

Rothrock, Paul E. 2004. Floristic Quality Assessment in Indiana: The Concept, Use, and Development of Coefficients of Conservatism. Final Report for ARN A305-4-53, EPA Wetland Program Development Grant CD975586-01. Taylor University, Upland, Indiana.

United States Department of Agriculture (USDA), Forest Service (USFS). 1989. Final Environmental Impact Statement for the Vegetation Management in the Appalachian Mountains.

United States Department of Agricultural (USDA), Natural Resources Conservation Service (NRCS). 2020. Web Soil Survey at https://websoilsurvey.nrcs.usda.gov/app/ [Accessed May 19, 2020.]

USEPA. 2020. Current Nonattainment Counties for all Criteria Pollutants. Data current as of March 31, 2020. Available at https://www3.epa.gov/airquality/greenbook/ancl.html [Accessed 4/24/20]

USFS. 1997. Final Environmental Impact Statement, Vegetation Management on Electric Utility Rights-of-Way, Allegheny National Forest.

USFS. 1998. Record of Decision and Final Environmental Impact Statement for Amending the Daniel Boone National Forest Off-Highway Vehicle Management Direction.

USFS. Pacific Northwest Region. 1996. *"Triclopyr Herbicide Information Profile."*

USFS. 2003a. Programmatic Biological Evaluation for the Revised Land and Resource Management Plan. Daniel Boone National Forest. November. 53 pp.

USFS. 2004. Land and Resource Management Plan for the Daniel Boone National Forest. U.S. Department of Agriculture, Forest Service, Southern Region, Daniel Boone National Forest. Winchester, KY.

USFS. Southern Region. 2004. Appendices to Final Environmental Impact Statement, Land and Resource Management Plan.

USFS. Stearns Ranger District. 2014. "Laurel Creek Trail #620." Trail map and guide.

USFS. 2020. Interactive Viewer Map. Available at https://www.fs.fed.us/ivm/index.html. [Accessed May 15, 2020.]

U.S. Department of the Interior, Fish and Wildlife Service. *National Wetland Inventory.*

U.S. Fish and Wildlife Service. 2019. Rangewide Indiana Bat Survey Guidelines. 63 pp.

White, Mark. 2016. "Williamsburg family donates land for boat ramp on Cumberland River." News Journal. August 10, 2016.

Whitley County Tourism. 2020. "Get Wet! Explore Our Waterways and Water Park." Available at https://www.whitleycountytourism.com/get-wet.html. [Accessed May 15, 2020.]

World Health Organization (WHO). 2009. *"What are Electromagnetic Fields."*

Young, Joshua R. November 18, 2020. *Biological Assessment and Evaluation, McCreary County Junction – KU Wofford 69 kV Transmission Line Rebuild Project, Daniel Boone National Forest, Stearns Ranger District, McCreary and Whitley Counties, Kentucky.* East Kentucky Power Cooperative.

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EXHIBIT A. USFS TRACT/ACCESS ROAD INFORMATION

Daniel Boone National Forest
Stearns Ranger District
EKPC Special Use Permit No. 4062 Amendment
Forest Service Tract Information

Tract No.	Length (mi)	Length (ft)	Acreage^	Existing Structures	Proposed Structures
C-1356	2.11	11,120	25.53	19	14
C-2944*	0.07	355	0.81	1	1
C-2851b*	0.22	1,150	2.64	1	1
C-1695-I	0.20	1,060	2.43	1	1
C-1695	0.37	1,930	4.43	3	2
C-1379	0.20	1065	2.44	2	1
C-2938a*	0.05	290	0.67	0	0
C-1785a	0.77	4,055	9.31	6	4
C-1355q*	0.03	140	0.32	0	0
C-1355q-I	0.54	2,825	6.49	6	3
C-903d*	0.56	2,980	6.84	5	2
C-2892	0.39	2,035	4.67	3	2
C-1733a	0.54	2,860	6.57	4	2
C-1355	0.69	3,660	8.40	9	7
C-1745	0.60	3,160	7.25	4	2
C-1772*	0.02	105	0.24	0	0
C-1355h	0.59	3,140	7.21	7	5
C-2794	0.64	3,360	7.71	5	3
	8.6	**45,290**	**104.0**	**76**	**50**

^Acreages calculated based on GIS length measurements and 100-foot wide right-of-way (ROW).

*Tract No. not listed on existing Special Use Permit (SUP) No. 4062

SUP No. 4062 lists Tract No. 1729, but this is tract is actually located to the south of ROW

EKPC Special Use Permit No. 4062 Amendment
Access Road Information

Proposed Structure Access	Length (ft.)	Length (mi.)	Acreage^	Tract No.	Anticipated Road Improvements
AY-4	442	0.08	0.2	1356	Vegetation Clearing Only
AY010 (removal)	2369	0.45	0.8	1257, 1356	New Construction
AY-10	2677	0.51	0.9	1257, 1356	Widening/Clearing
AY-11	1268	0.24	0.4	2851b, 2944	New Construction
AY-17	567	0.11	0.2	1695-I, 1695	Widening/Clearing
AY-18	938	0.18	0.3	1695, 1356	Widening/Clearing
AY-19	2459	0.47	0.8	1379, 1695, 1356	Widening/Clearing
AY-20	1238	0.23	0.4	1695, 1356	Widening/Clearing
AY026 (removal)	476	0.09	0.2	1379	New Construction
AY-21	3869	0.73	1.3	1379	Widening/New Construct.
AY-22	3559	0.67	1.2	1379, 1498a, 1356	Widening/Clearing
AY-23	2650	0.50	0.9	1695, 1356	Widening/Clearing
AY-24	1166	0.22	0.4	1356	Widening/Clearing
AY-25	1532	0.29	0.5	1356	Widening/Clearing
AY-28	420	0.08	0.1	2938a, 1785a	Widening/Clearing
AY-29	311	0.06	0.1	1785a	Widening/Clearing
AY-30	226	0.04	0.1	1785a	Widening/Clearing
AY-32	2272	0.43	0.8	1785a	Widening/Clearing
AY-34	762	0.14	0.3	1355q-I	Vegetation Clearing Only
AY-35	1484	0.28	0.5	903d, 1355q-I	Widening/Clearing
AY-36	1922	0.36	0.7	903d	Vegetation Clearing Only
AY-37	4622	0.88	1.6	903d	Vegetation Clearing Only
AY-38	3950	0.75	1.4	1759-I, 1585-II, 1585-I, 2892	Widening/Clearing
AY-39	1501	0.28	0.5	1585-II, 1733a	Widening/Clearing
AY-40	1992	0.38	0.7	1585-II, 1733a	Widening/Clearing
AY-41	2046	0.39	0.7	1759-I, 1733a	Widening/Clearing
AY-43	3010	0.57	1.0	1355	Widening/Clearing
AY-44	1055	0.20	0.4	1745	Vegetation Clearing Only
AY-45	4911	0.93	1.7	3004, 1355, 1745	Widening/New Construct.
AY-54	363	0.07	0.1	1355	Widening/Clearing
AY-59	262	0.05	0.1	1355h	Widening/Clearing
AY-64	630	0.12	0.2	2794	Widening/Clearing
AY-65	1030	0.20	0.4	2794	Widening/Clearing
	57,979	**10.98**	**20.0**		

^Acreages calculated based on GIS length measurements and approximate 15-foot width.

EXHIBIT B. PROJECT MAPS

1. Project Overview Map
2. Project Topographic Maps 1 – 4
3. NFS Lands Topographic Maps 1 – 3
4. Project Aerial Maps 1 – 6
5. NFS Lands Aerial Maps 1 – 5
6. Cultural Resource APE Maps 1 – 4
7. Floodplain Maps (Overview & 1 – 5)
8. Stream Crossing/Wetland Avoidance Maps 1 – 4
9. Laurel Creek Crossing Map
10. Marsh Creek Crossing Map
11. Youngs Creek Crossing Map
12. Bat Habitat Maps 1 – 9

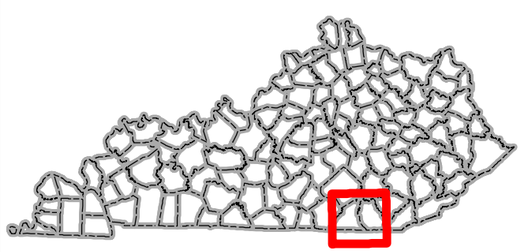
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Overview Map

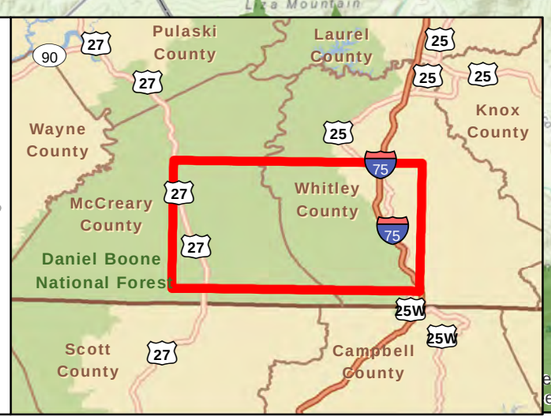
Special Use Permit No. 4062 - Coverage Area

- Proposed Rebuild
- EKPC Substations
- Kentucky Utilities (KU) Substations
- Existing EKPC Transmission Lines
- Existing KU Transmission Lines
- National Forest System Lands

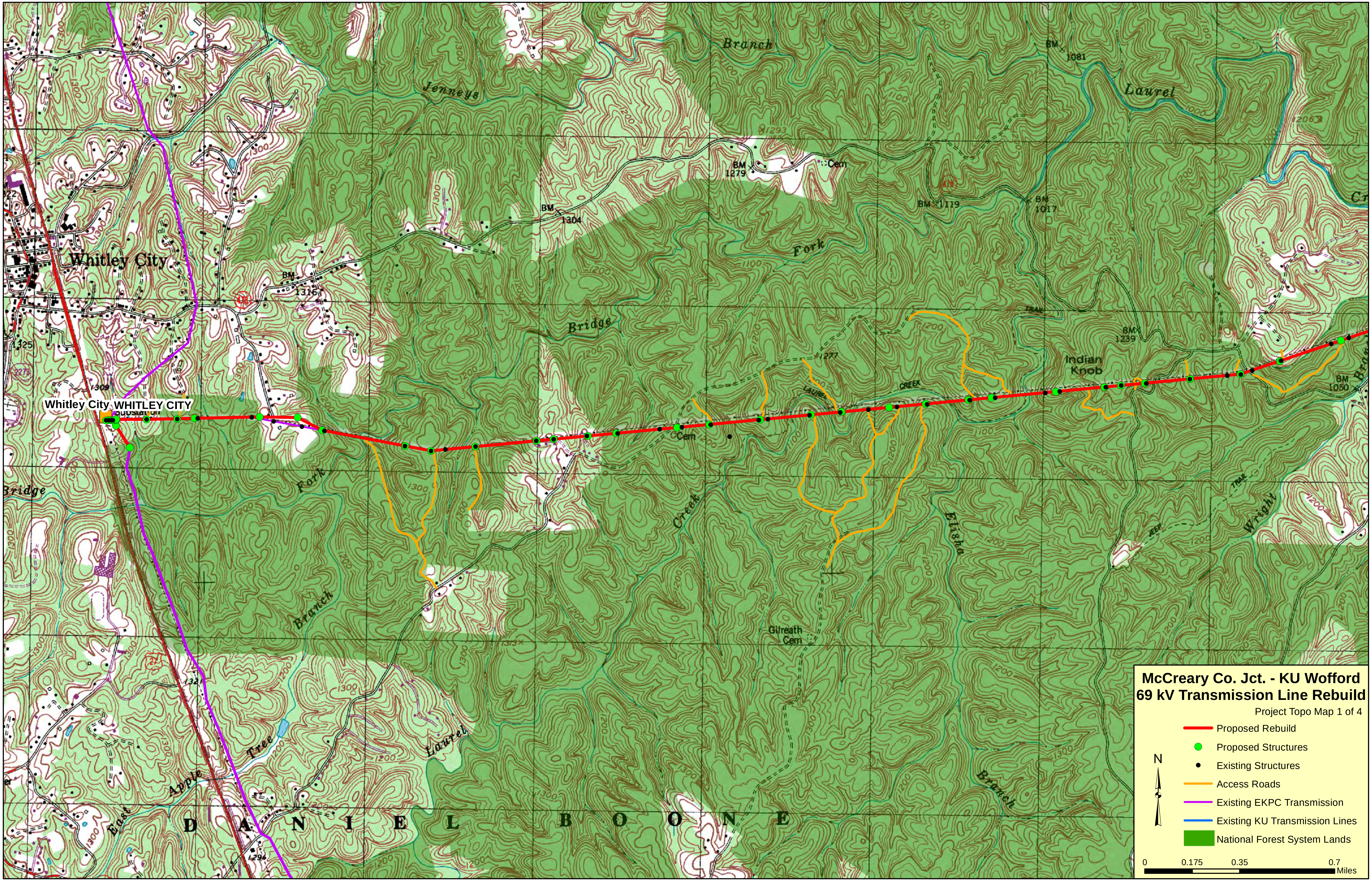
N

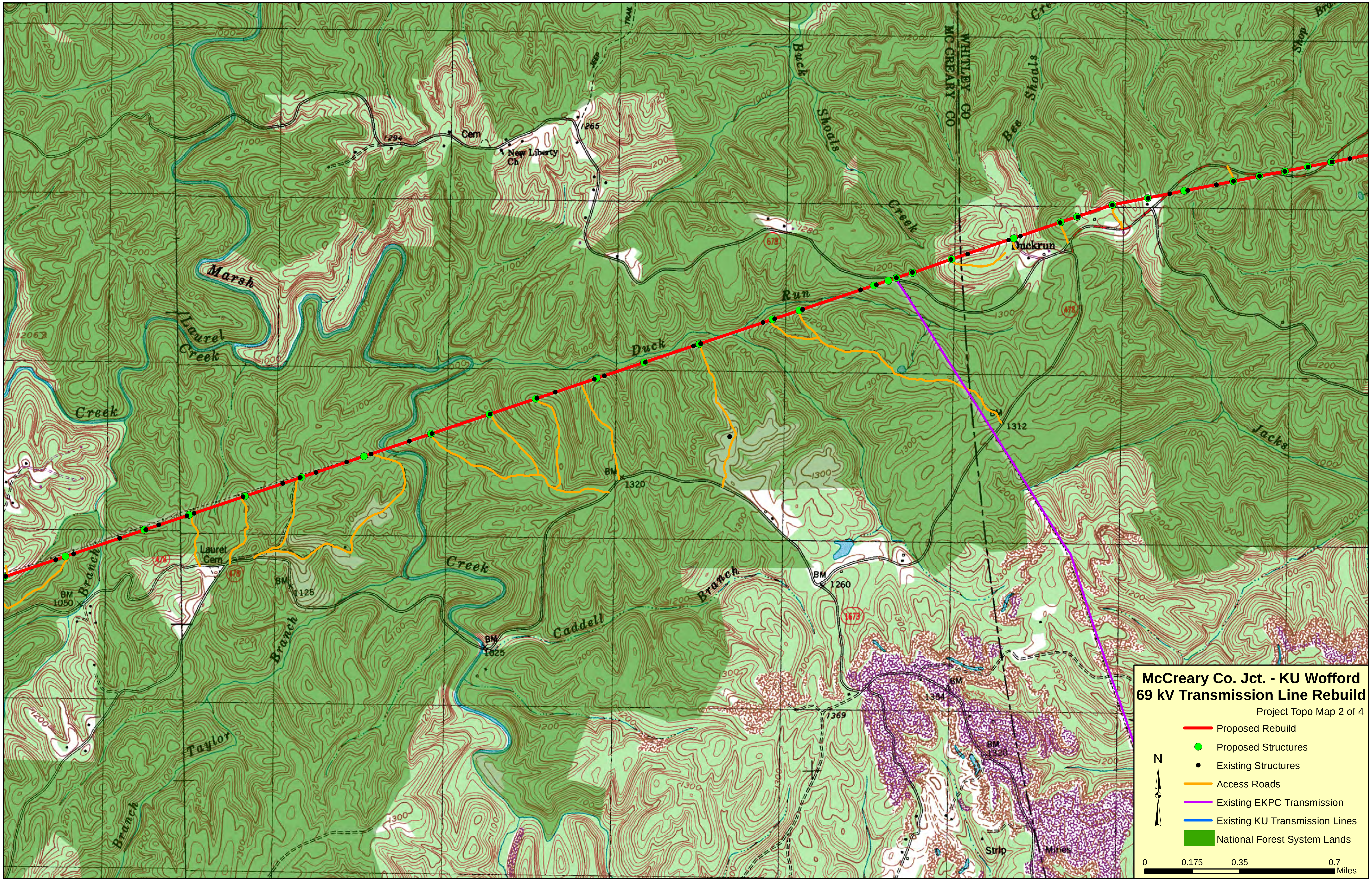
0 1 2 4 Miles





WHITLEY CITY
Whitley City
REVELO
McCreary County
East Pine Knot
Pine Knot
Jellico Creek
Goldbug
WOFFORD
WILLIAMSBURG
WILLIAMSBURG SWITCHING
WILLIAMSBURG SOUTH


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Topo Map 1 of 4
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
National Forest System Lands
N
0
0.175
0.35
0.7
Miles
Whitley City
WHITLEY CITY
Substation
Indian Knob
Gilreath Cem
D A N I E L B O O N E


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Topo Map 2 of 4
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
National Forest System Lands
N
0
0.175
0.35
0.7
Miles
Marsh
Laurel Creek
Creek
Duck
Run
Buck
Shoals
Creek
Bee
Shoals
Jacks
Duckrun
New Liberty Ch
Cem
Laurel Cem
Branch
Caddell
Taylor
WHITLEY CO
MC CREARY CO
Strip
Mines
BM 1260
BM 1312
BM 1320
BM 1125
BM 1025
BM 1050
1369

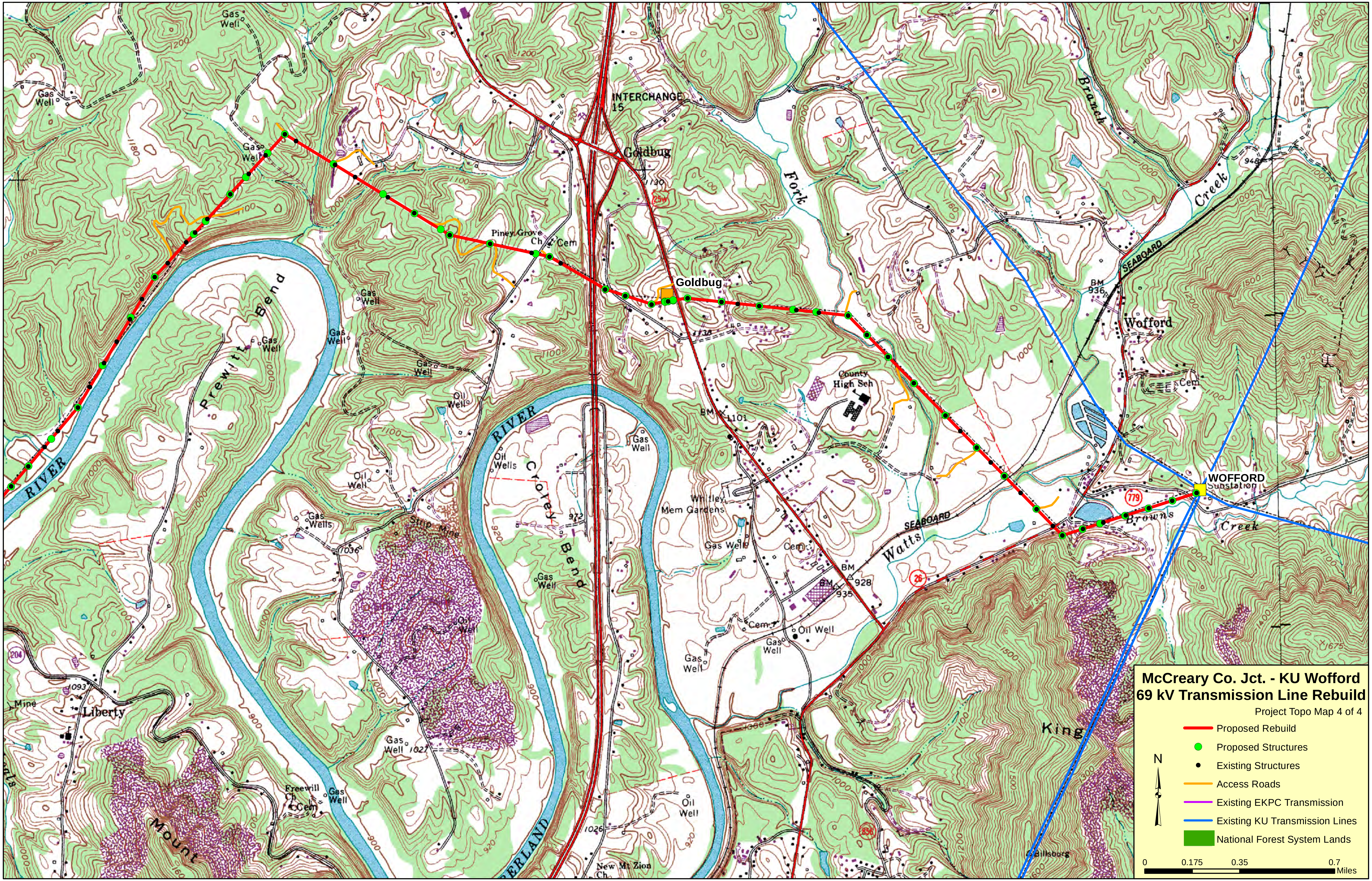
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

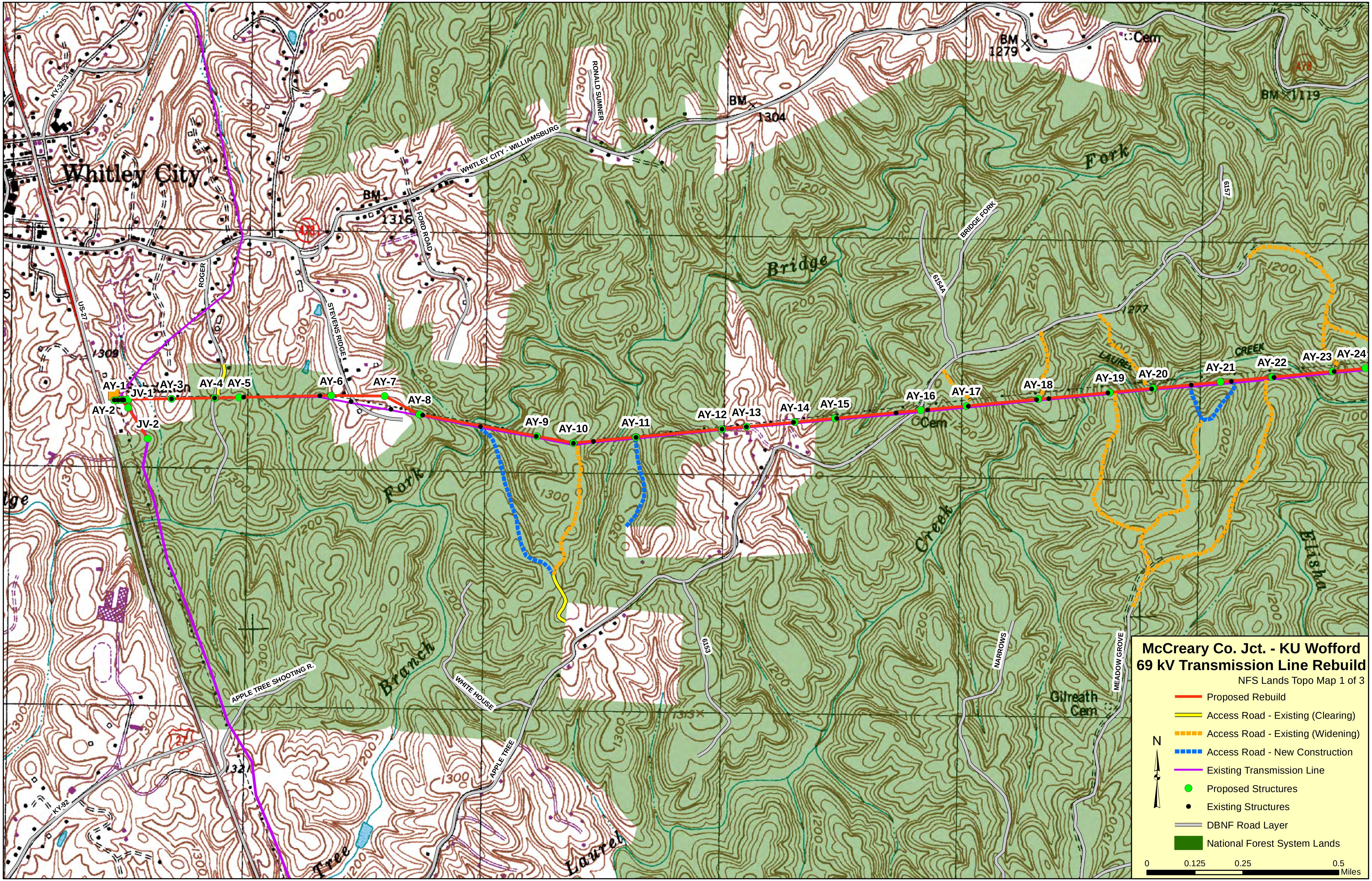
Project Topo Map 3 of 4

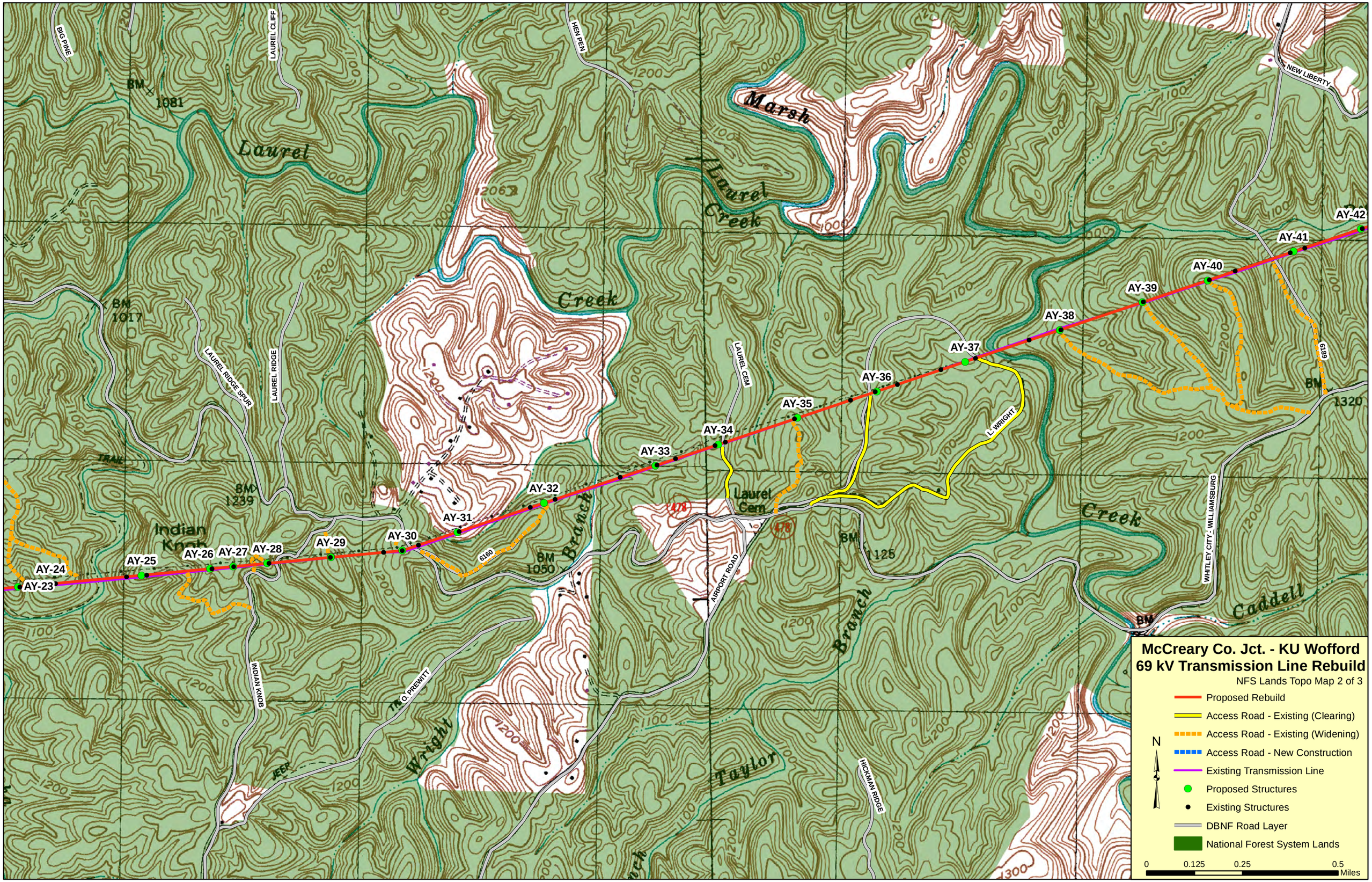
- Proposed Rebuild
- Proposed Structures
- Existing Structures
- Access Roads
- Existing EKPC Transmission
- Existing KU Transmission Lines
- National Forest System Lands

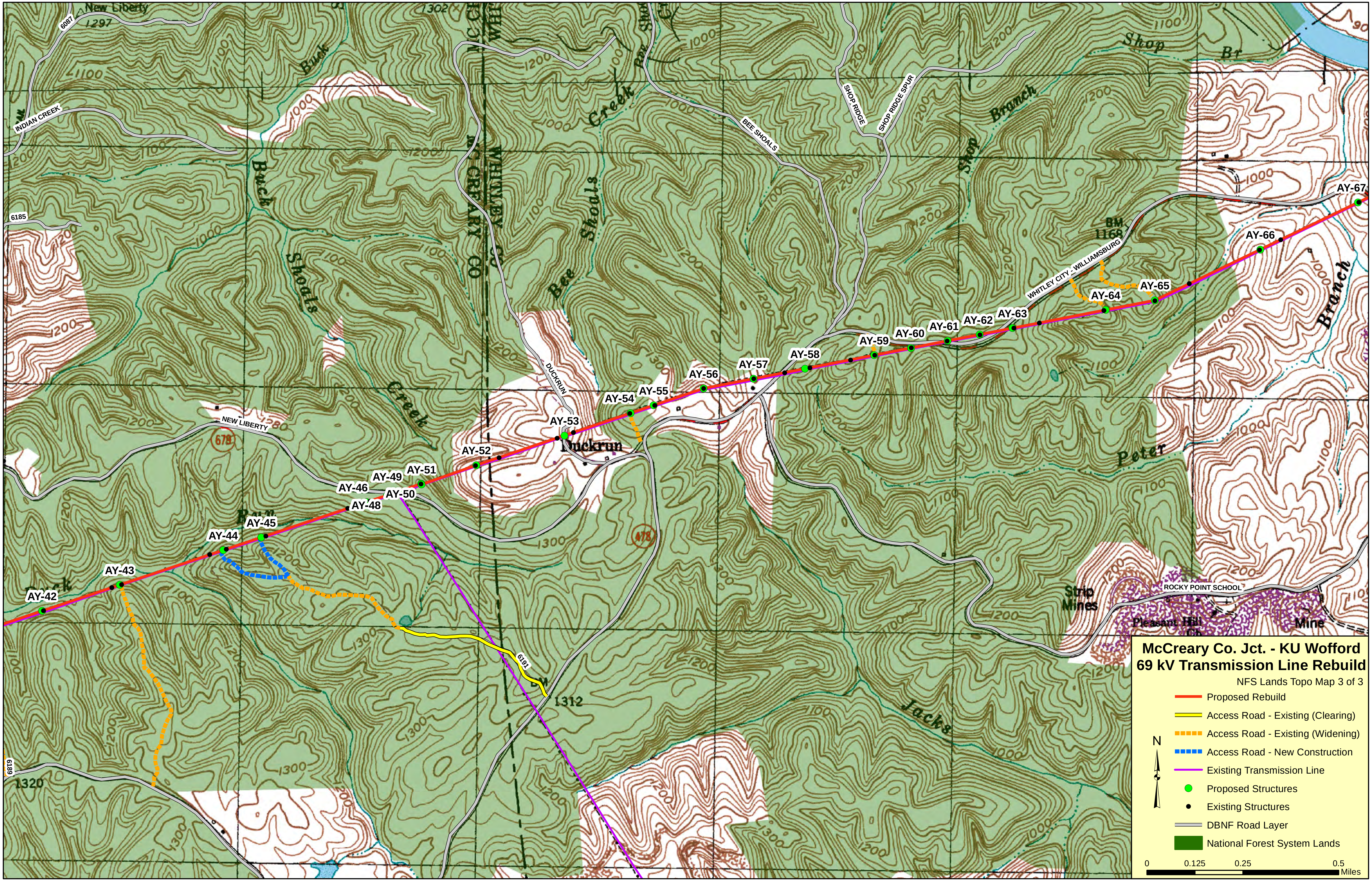
N

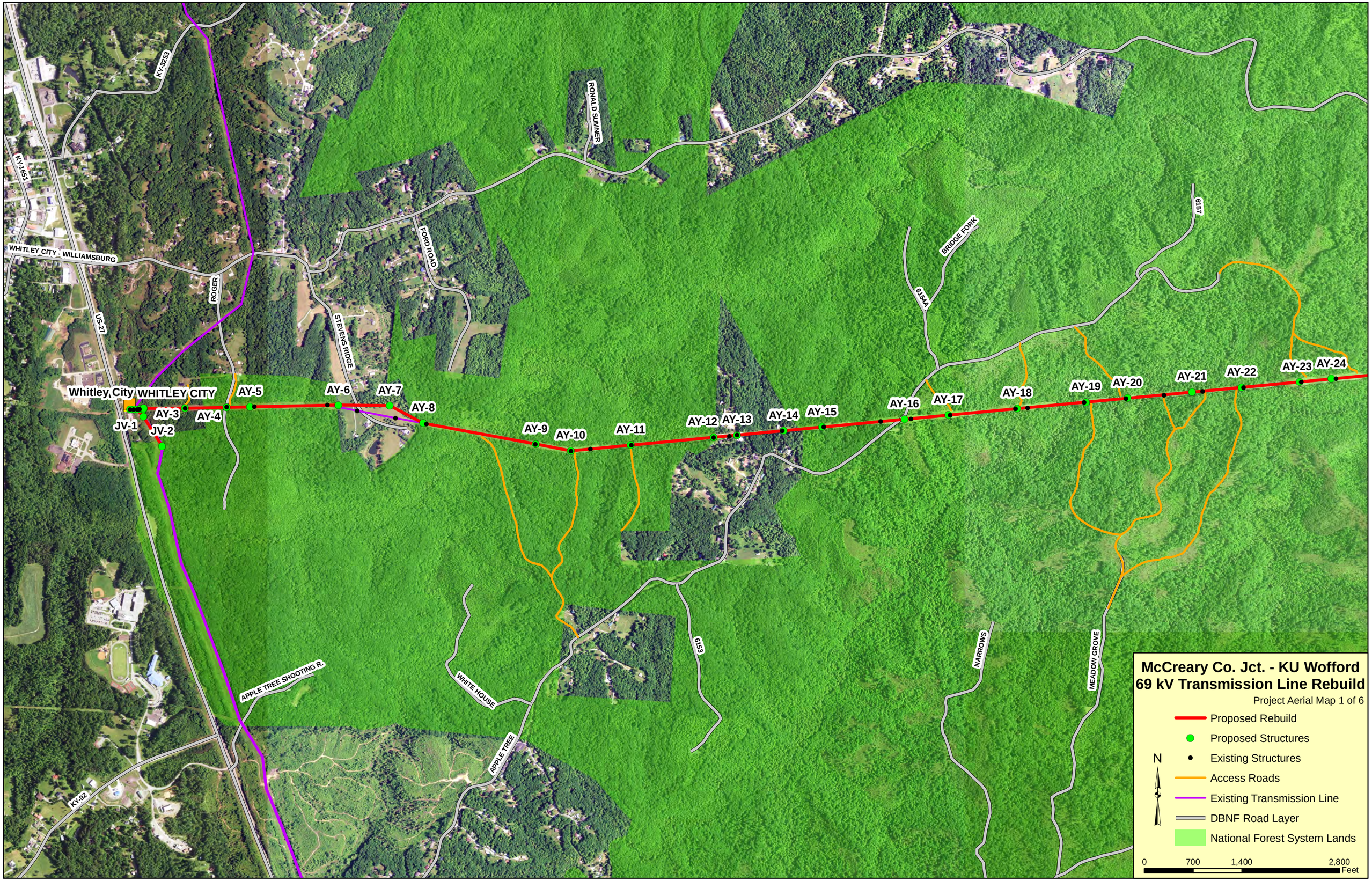
0 0.175 0.35 0.7 Miles


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Topo Map 4 of 4
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
National Forest System Lands
N
0
0.175
0.35
0.7
Miles
WOFFORD
Substation
Wofford
Goldbug
INTERCHANGE 15
Piney Grove Ch
Cem
County High Sch
Whitley Mem Gardens
SEABOARD
Watts
Browns Creek
Fork
Branch
Creek
RIVER
Prewitt Bend
Croley Bend
CUMBERLAND
Liberty
Freewill Ch
Strip Mine
King
Mount
New Mt Zion Ch
Gas Well
Oil Well


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Topo Map 1 of 3
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0 0.125 0.25 0.5 Miles
Whitley City
WHITLEY CITY - WILLIAMSBURG
Bridge Fork
Laurel Creek
Tree Branch
Elisha
AY-1
AY-2
AY-3
AY-4
AY-5
AY-6
AY-7
AY-8
AY-9
AY-10
AY-11
AY-12
AY-13
AY-14
AY-15
AY-16
AY-17
AY-18
AY-19
AY-20
AY-21
AY-22
AY-23
AY-24
JV-1
JV-2
US-27
KY-92
RONALD SUMNER
FORD ROAD
STEVENS RIDGE
ROGER
BRIDGE FORK
APPLE TREE SHOOTING R.
WHITE HOUSE
APPLE TREE
NARROWS
MEADOW GROVE
Gilreath Cem


AY-23
AY-24
AY-25
AY-26
AY-27
AY-28
AY-29
AY-30
AY-31
AY-32
AY-33
AY-34
AY-35
AY-36
AY-37
AY-38
AY-39
AY-40
AY-41
AY-42
BIG PINE
LAUREL CLIFF
HEN PEN
NEW LIBERTY
LAUREL RIDGE SPUR
LAUREL RIDGE
LAUREL CEM
L. WRIGHT
INDIAN KNOB
T.O. PREWITT
AIRPORT ROAD
HICKMAN RIDGE
WHITLEY CITY - WILLIAMSBURG
6189
6160
TRAIL
JEEP
Laurel
Creek
Marsh
Indian Knob
Laurel Cem
Wright
Taylor
Caddell
Branch
BM 1081
BM 1017
BM 1239
BM 1050
BM 1125
BM 1320
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Topo Map 2 of 3
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
0.125
0.25
0.5
Miles


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Topo Map 3 of 3
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
0.125
0.25
0.5
Miles
AY-42
AY-43
AY-44
AY-45
AY-46
AY-48
AY-49
AY-50
AY-51
AY-52
AY-53
AY-54
AY-55
AY-56
AY-57
AY-58
AY-59
AY-60
AY-61
AY-62
AY-63
AY-64
AY-65
AY-66
AY-67
NEW LIBERTY
INDIAN CREEK
DUCKRUN
BEE SHOALS
SHOP RIDGE
SHOP RIDGE SPUR
WHITLEY CITY - WILLIAMSBURG
ROCKY POINT SCHOOL
New Liberty
Duckrun
Strip Mines
Pleasant Hill Ch
Shop Branch
Peter
Jacks
1312
1320


KY-3253
KY-1651
WHITLEY CITY - WILLIAMSBURG
ROGER
US-27
STEVENS RIDGE
FORD ROAD
RONALD SUMNER
BRIDGE FORK
6154A
6157
Whitley City
WHITLEY CITY
JV-1
JV-2
AY-3
AY-4
AY-5
AY-6
AY-7
AY-8
AY-9
AY-10
AY-11
AY-12
AY-13
AY-14
AY-15
AY-16
AY-17
AY-18
AY-19
AY-20
AY-21
AY-22
AY-23
AY-24
APPLE TREE SHOOTING R.
WHITE HOUSE
APPLE TREE
6153
NARROWS
MEADOW GROVE
KY-92
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Aerial Map 1 of 6
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing Transmission Line
DBNF Road Layer
National Forest System Lands
N
0
700
1,400
2,800
Feet

BIG PINE
LAUREL CLIFF
HEN PEN
NEW LIBERTY
LAUREL RIDGE SPUR
LAUREL RIDGE
LAUREL CEM
L. WRIGHT
6189
AIRPORT ROAD
WHITLEY CITY - WILLIAMSBURG
INDIAN KNOB
O. PREWITT
HICKMAN RIDGE
6160
6163

AY-22
AY-23
AY-24
AY-25
AY-26
AY-27
AY-28
AY-29
AY-30
AY-31
AY-32
AY-33
AY-34
AY-35
AY-36
AY-37
AY-38
AY-39
AY-40
AY-41

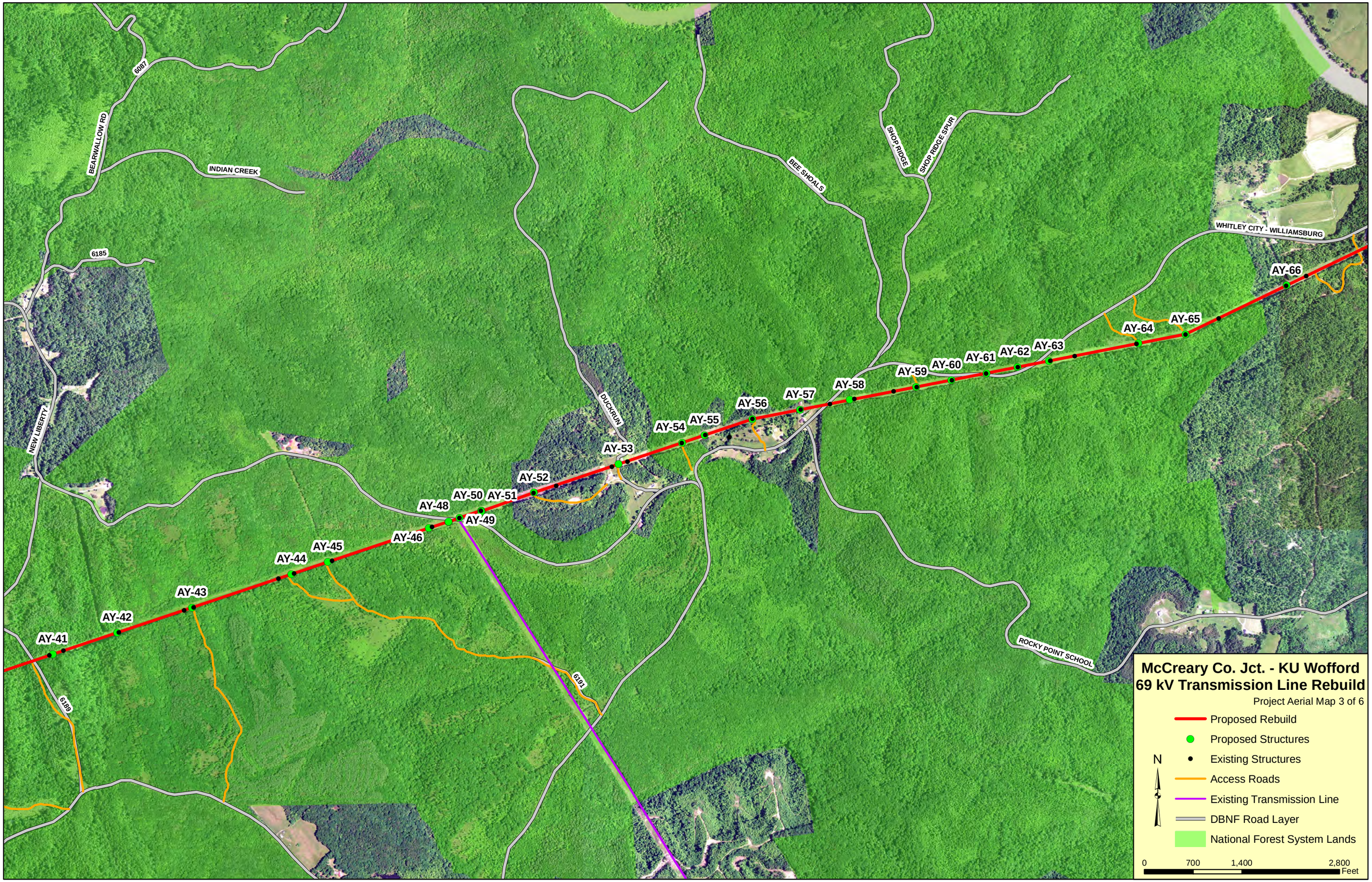
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

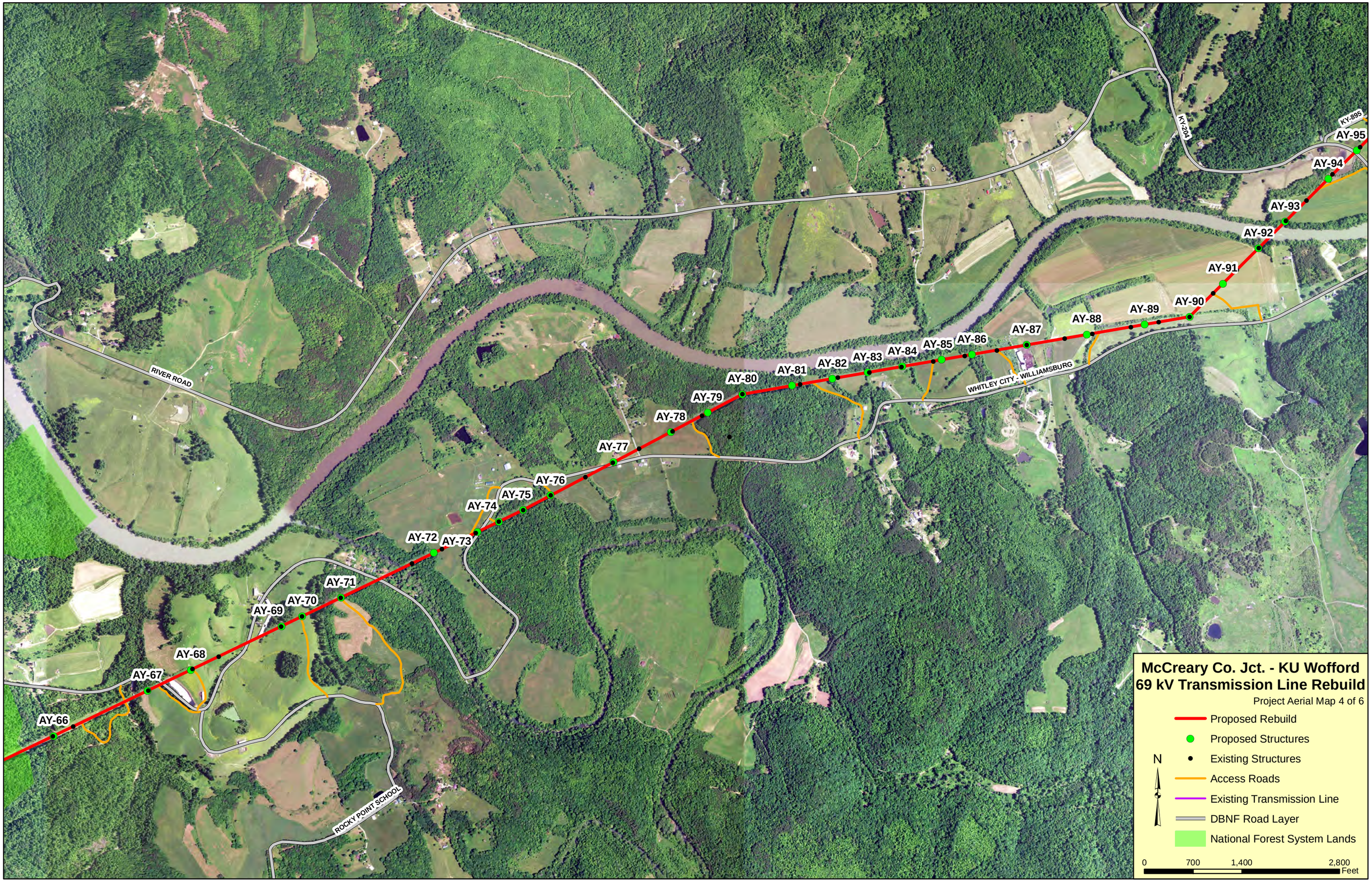
Project Aerial Map 2 of 6

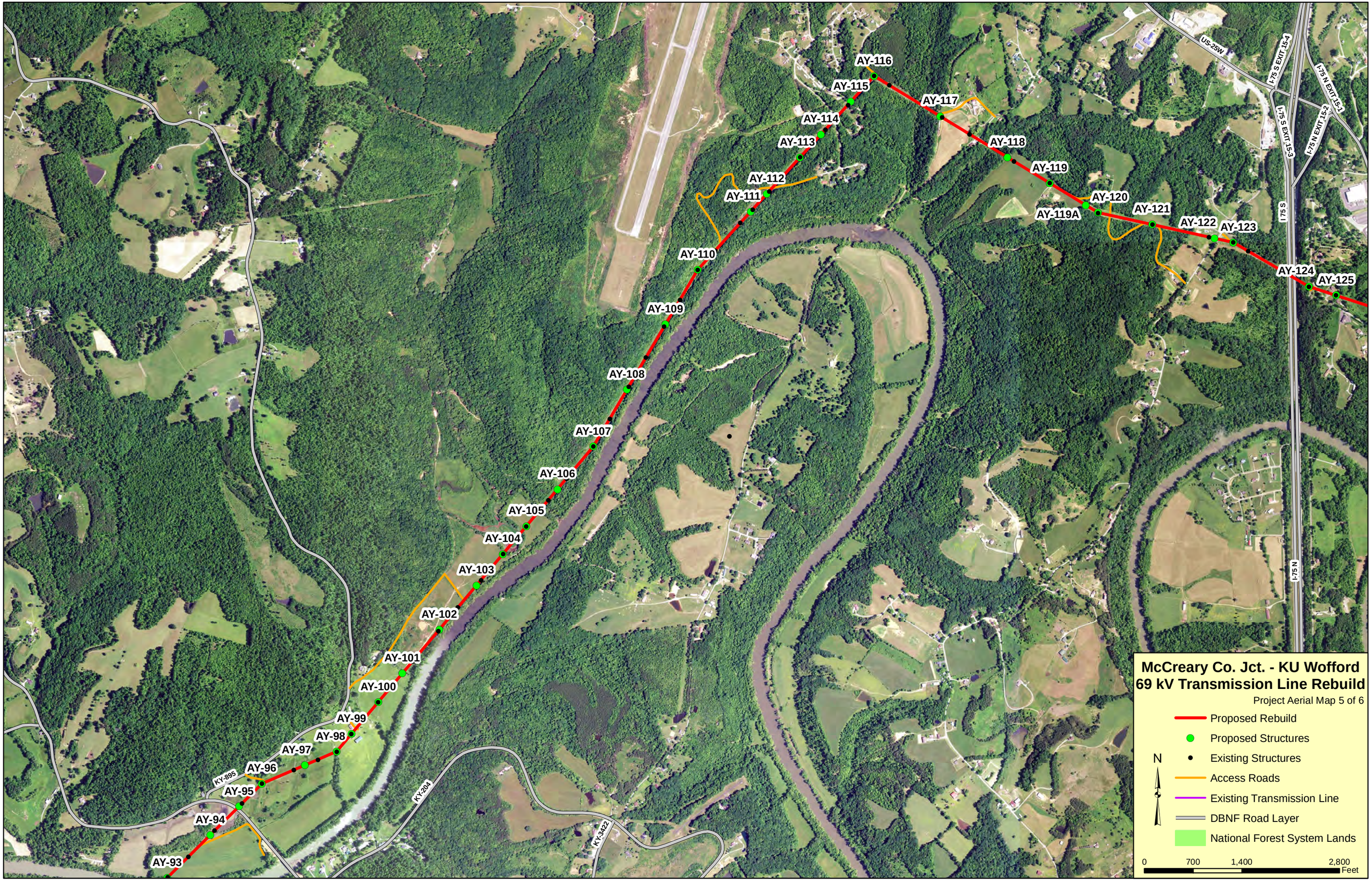
- Proposed Rebuild
- Proposed Structures
- Existing Structures
- Access Roads
- Existing Transmission Line
- DBNF Road Layer
- National Forest System Lands

N

0 700 1,400 2,800 Feet


6087
BEARWALLOW RD
INDIAN CREEK
6185
NEW LIBERTY
BEE SHOALS
SHOP RIDGE
SHOP RIDGE SPUR
WHITLEY CITY - WILLIAMSBURG
DUCKRUN
ROCKY POINT SCHOOL
6191
6189
AY-41
AY-42
AY-43
AY-44
AY-45
AY-46
AY-48
AY-49
AY-50
AY-51
AY-52
AY-53
AY-54
AY-55
AY-56
AY-57
AY-58
AY-59
AY-60
AY-61
AY-62
AY-63
AY-64
AY-65
AY-66
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Aerial Map 3 of 6
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing Transmission Line
DBNF Road Layer
National Forest System Lands
N
0
700
1,400
2,800
Feet


RIVER ROAD
KY-204
KY-895
WHITLEY CITY - WILLIAMSBURG
ROCKY POINT SCHOOL
AY-66
AY-67
AY-68
AY-69
AY-70
AY-71
AY-72
AY-73
AY-74
AY-75
AY-76
AY-77
AY-78
AY-79
AY-80
AY-81
AY-82
AY-83
AY-84
AY-85
AY-86
AY-87
AY-88
AY-89
AY-90
AY-91
AY-92
AY-93
AY-94
AY-95
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Aerial Map 4 of 6
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing Transmission Line
DBNF Road Layer
National Forest System Lands
N
0
700
1,400
2,800
Feet


AY-116
AY-115
AY-117
AY-114
AY-113
AY-118
AY-112
AY-119
AY-111
AY-120
AY-119A
AY-121
AY-122
AY-123
AY-110
AY-124
AY-125
AY-109
AY-108
AY-107
AY-106
AY-105
AY-104
AY-103
AY-102
AY-101
AY-100
AY-99
AY-98
AY-97
AY-96
AY-95
AY-94
AY-93
US-25W
I-75 S EXIT 15-4
I-75 N EXIT 15-1
I-75 S EXIT 15-3
I-75 N EXIT 15-2
I-75 S
I-75 N
KY-895
KY-204
KY-3422
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Project Aerial Map 5 of 6
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing Transmission Line
DBNF Road Layer
National Forest System Lands
N
0
700
1,400
2,800
Feet

AY-117
AY-118
AY-119
AY-119A
AY-120
AY-121
AY-122
AY-123
AY-124
AY-125
AY-126
AY-131
Goldbug
AY-130
AY-133
AY-134
AY-135
AY-136
AY-137
AY-138
AY-139
AY-140
AY-141
AY-142
AY-143
AY-144
AY-145
AY-146
AY-147
AY-148
AY-149
AY-150
AY-151
WOFFORD
I-75 S EXIT 15-3
I-75 N EXIT 15-2
I-75 N EXIT 15-1
I-75 S
I-75 N
US-25W
KY-2385
KY-2382
KY-779
KY-26
KY-356

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

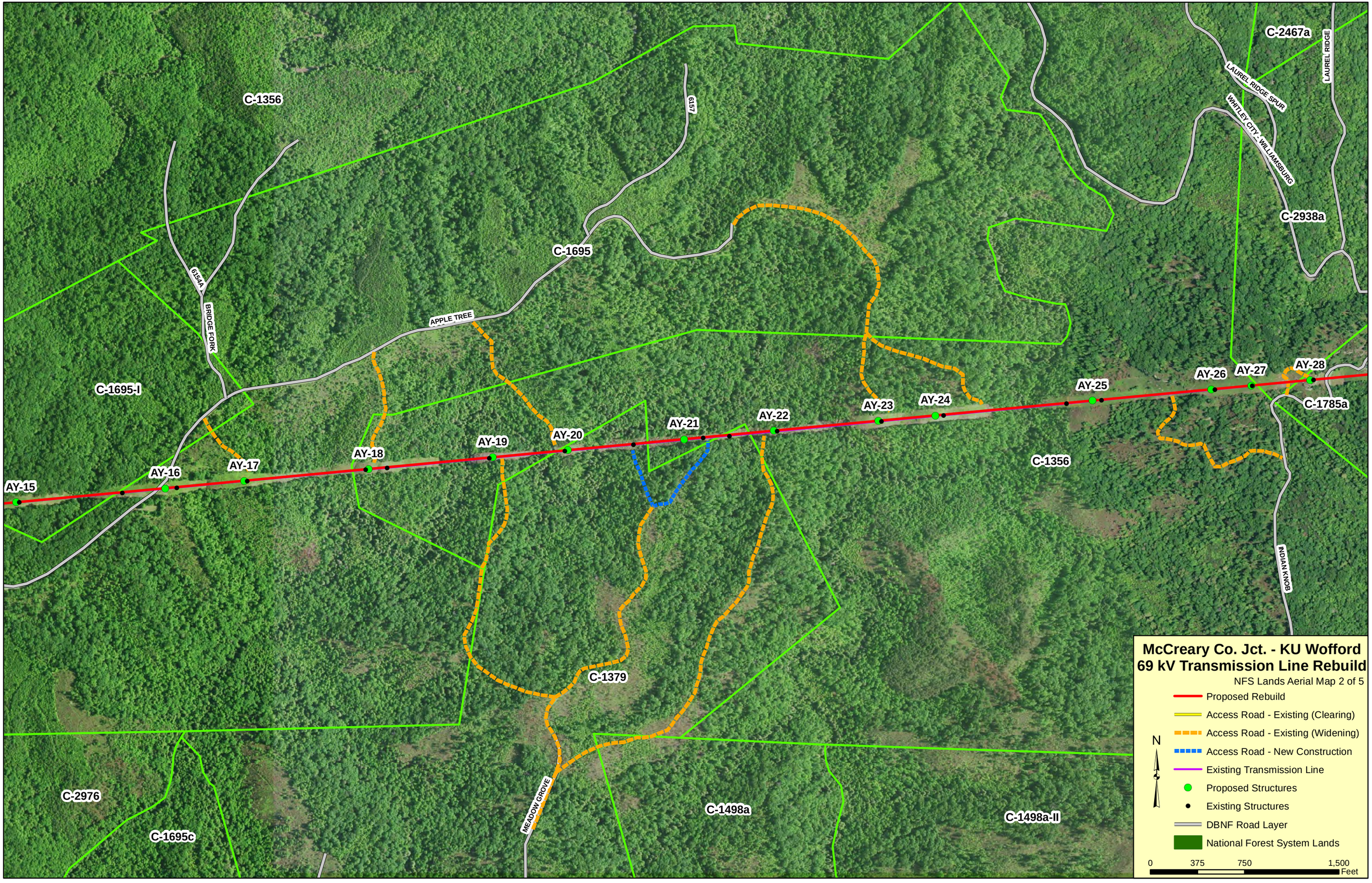
Project Aerial Map 6 of 6

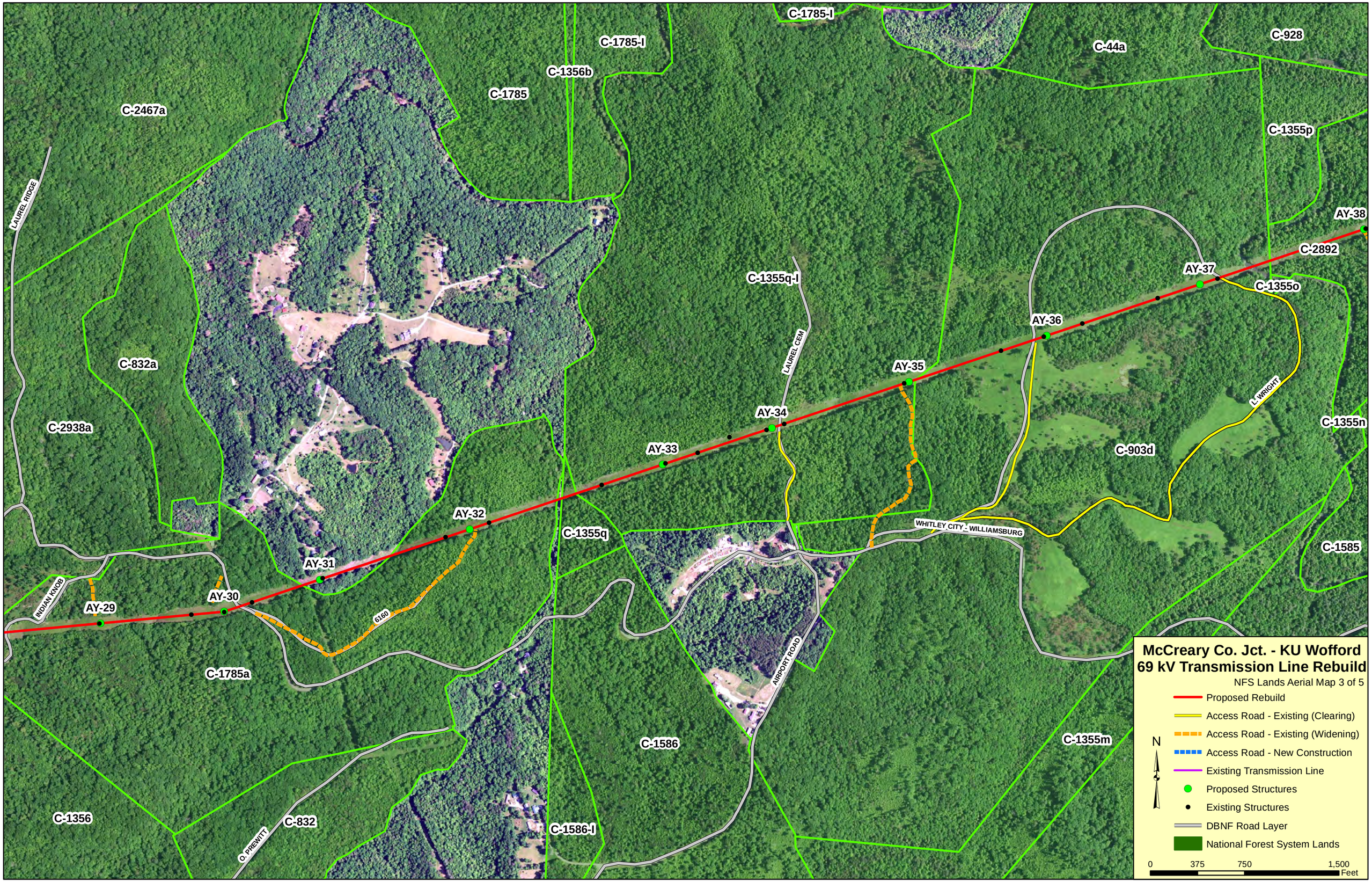
- Proposed Rebuild
- Proposed Structures
- Existing Structures
- Access Roads
- Existing Transmission Line
- DBNF Road Layer
- National Forest System Lands

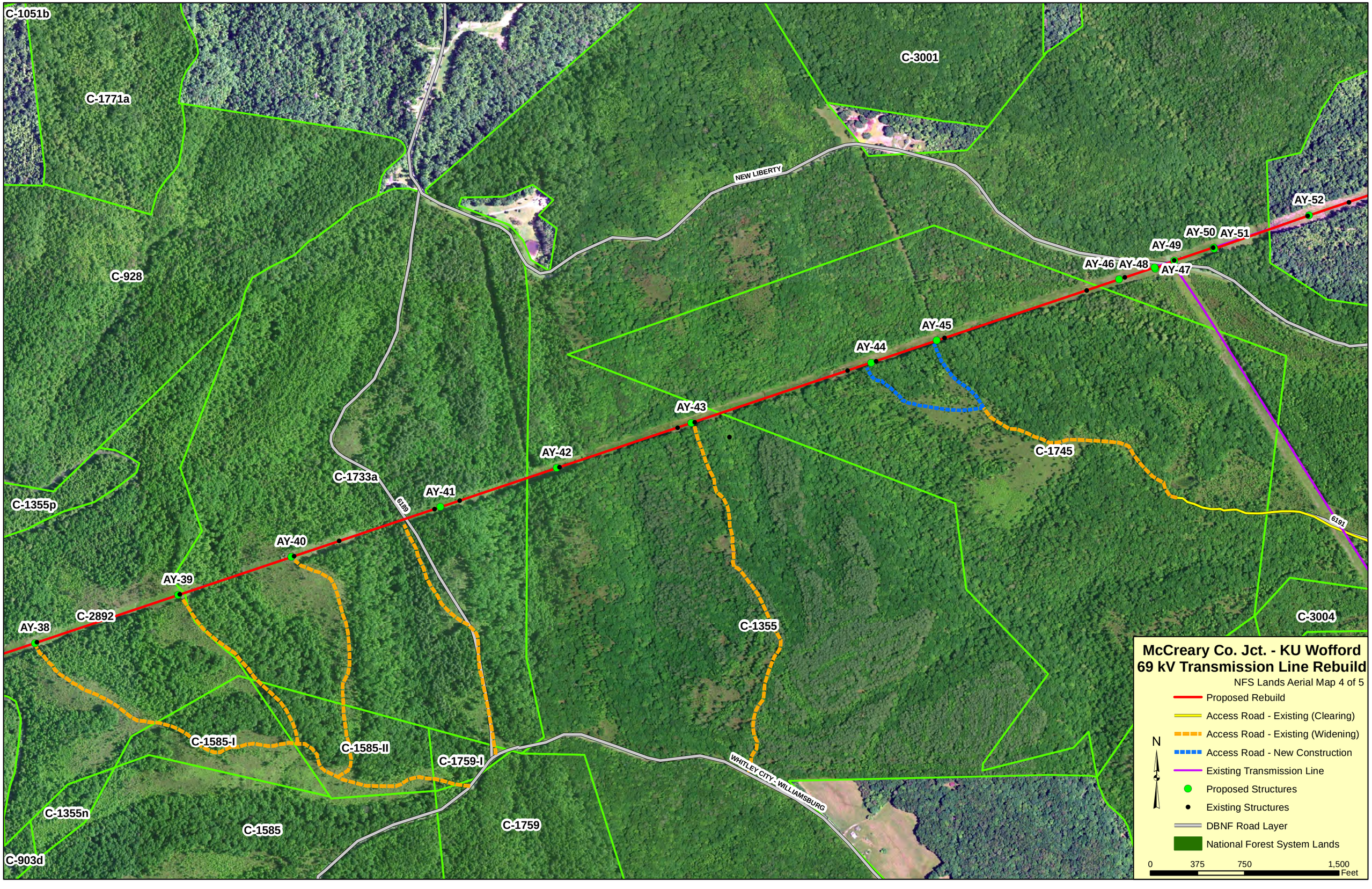
N

0 700 1,400 2,800 Feet

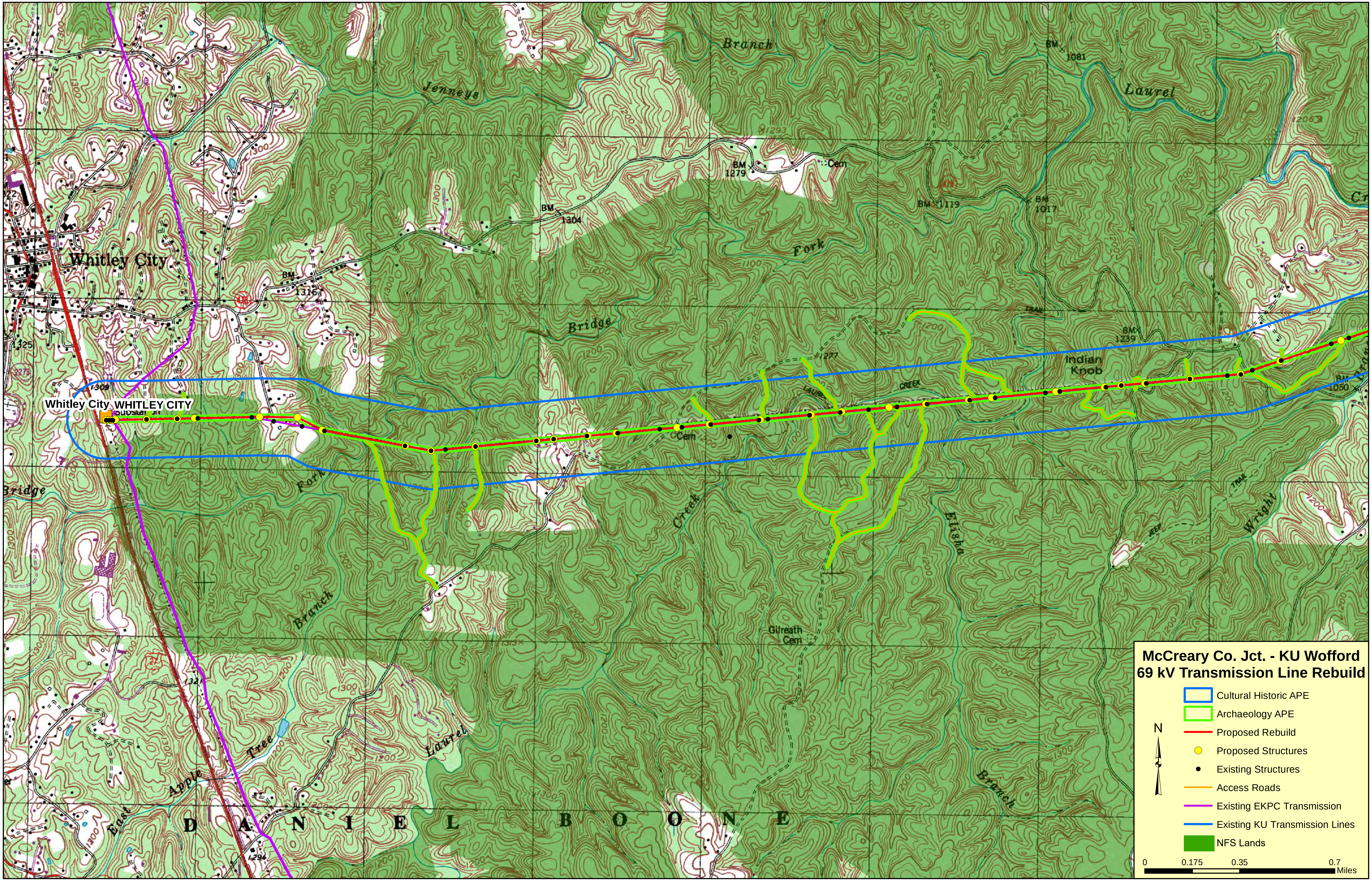

WHITLEY CITY - WILLIAMSBURG
FORD ROAD
ROGER
STEVENS RIDGE
AY-1
AY-2C
AY-2B
AY-3
AY-4
AY-5
AY-6
AY-7
AY-8
AY-9
AY-10
AY-11
AY-12
AY-13
AY-14
AY-15
Whitley City
JV-1
JV-2
C-1356
C-1695-I
C-2944
C-2851b
C-1695
C-4200
C-1257
US-27
WHITE HOUSE
APPLE TREE
6153
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Aerial Map 1 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
375
750
1,500
Feet

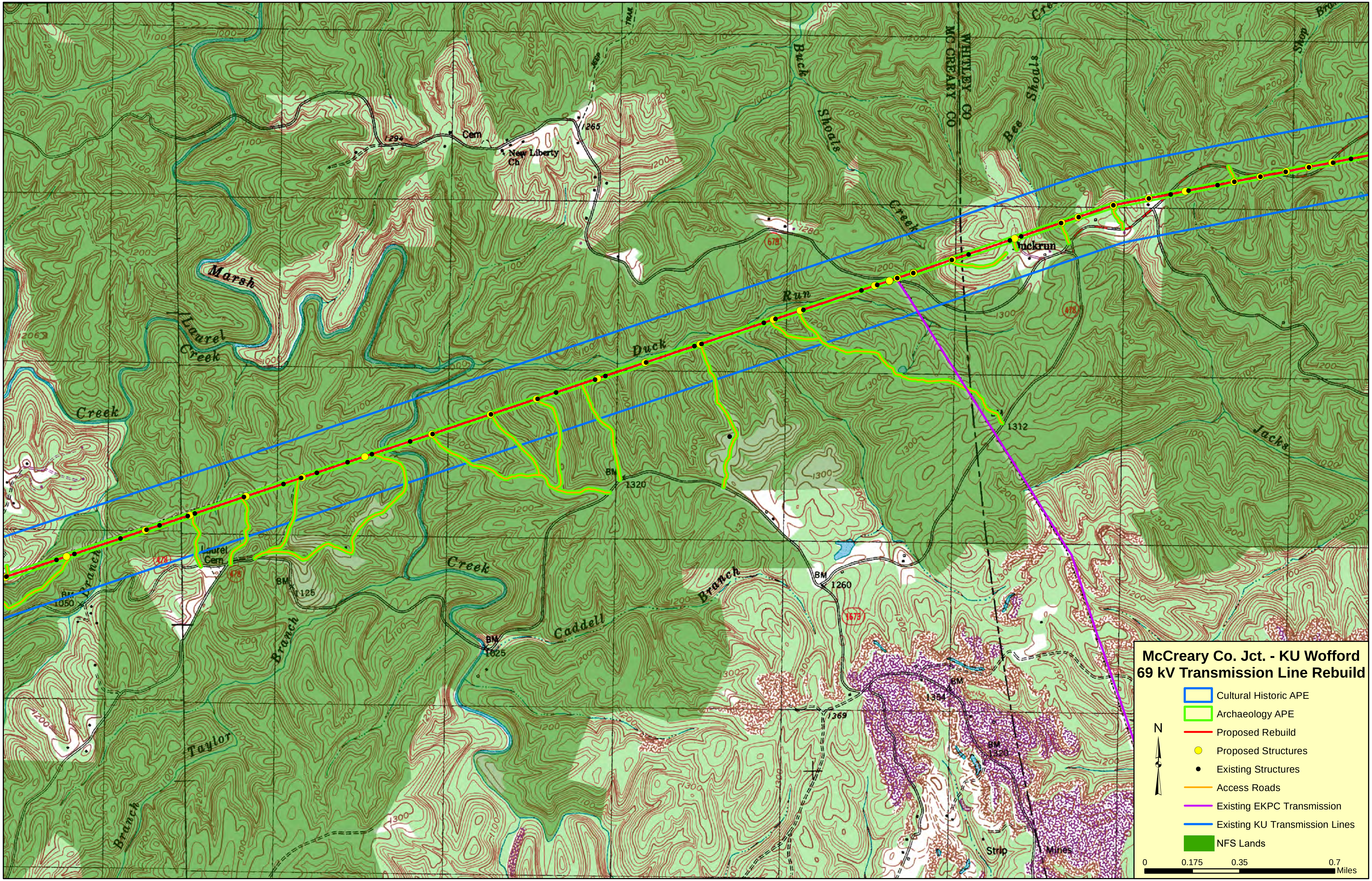

C-2467a
LAUREL RIDGE
LAUREL RIDGE SPUR
WHITLEY CITY - WILLIAMSBURG
C-1356
6157
C-2938a
C-1695
6154A
BRIDGE FORK
APPLE TREE
C-1695-I
AY-15
AY-16
AY-17
AY-18
AY-19
AY-20
AY-21
AY-22
AY-23
AY-24
AY-25
AY-26
AY-27
AY-28
C-1785a
C-1356
INDIAN KNOB
C-1379
C-2976
C-1695c
MEADOW GROVE
C-1498a
C-1498a-II
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Aerial Map 2 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
375
750
1,500
Feet


C-1785-I
C-1785-I
C-928
C-44a
C-1356b
C-1785
C-2467a
C-1355p
LAUREL RIDGE
AY-38
C-2892
AY-37
C-1355q-I
C-1355o
AY-36
LAUREL CEM
AY-35
C-832a
AY-34
L WRIGHT
C-2938a
C-1355n
AY-33
C-903d
AY-32
C-1355q
WHITLEY CITY - WILLIAMSBURG
C-1585
AY-31
INDIAN KNOB
AY-30
AY-29
6160
C-1785a
AIRPORT ROAD
C-1586
C-1355m
C-1356
O. PREWITT
C-832
C-1586-I
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Aerial Map 3 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
375
750
1,500
Feet

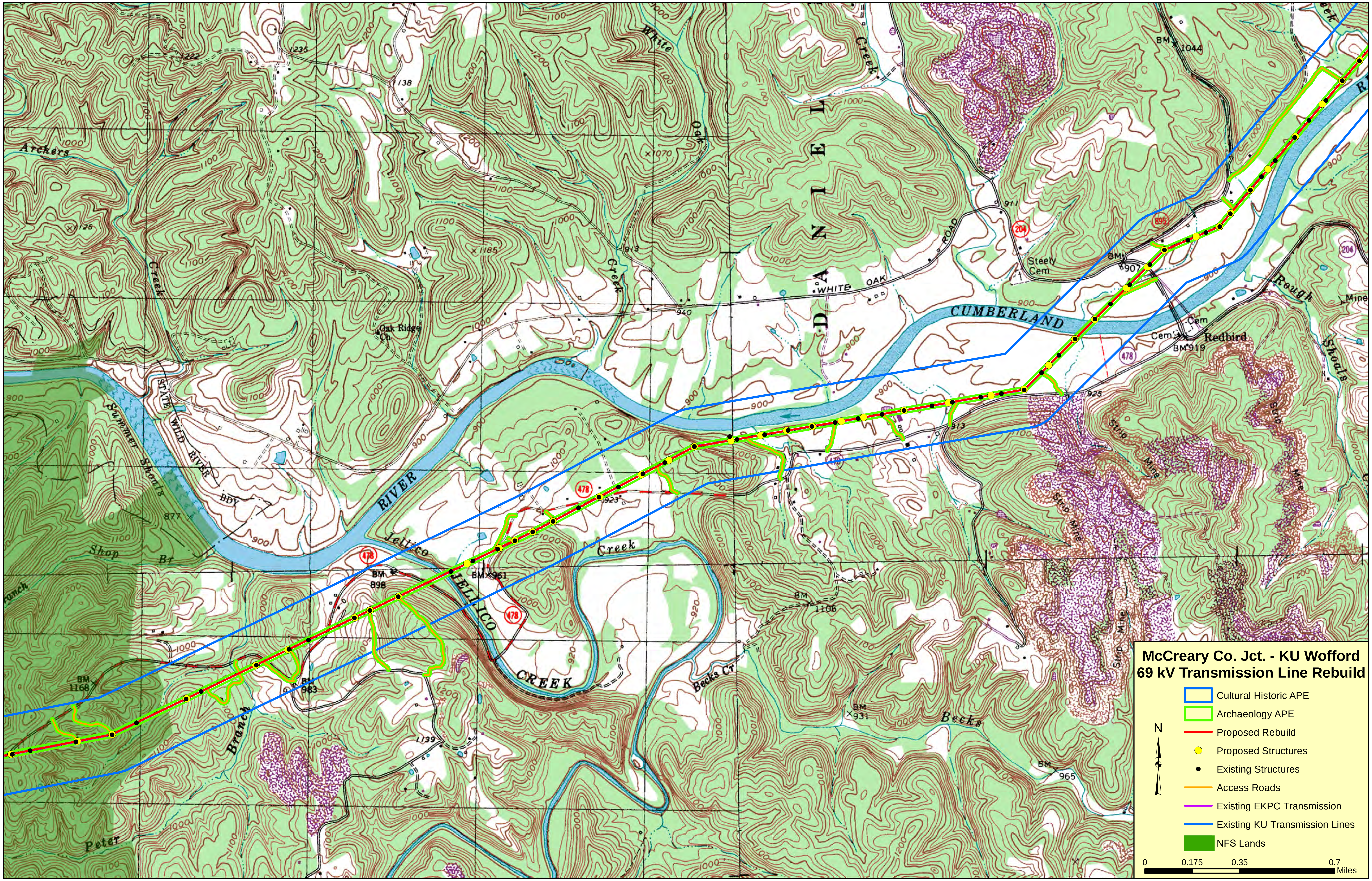

C-1051b
C-1771a
C-928
C-3001
NEW LIBERTY
AY-52
AY-50
AY-51
AY-49
AY-46
AY-48
AY-47
AY-45
AY-44
AY-43
AY-42
C-1745
6191
C-1733a
AY-41
6189
C-1355p
AY-40
AY-39
C-2892
AY-38
C-1355
C-3004
C-1585-I
C-1585-II
C-1759-I
WHITLEY CITY - WILLIAMSBURG
C-1355n
C-1585
C-1759
C-903d
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Aerial Map 4 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
375
750
1,500
Feet

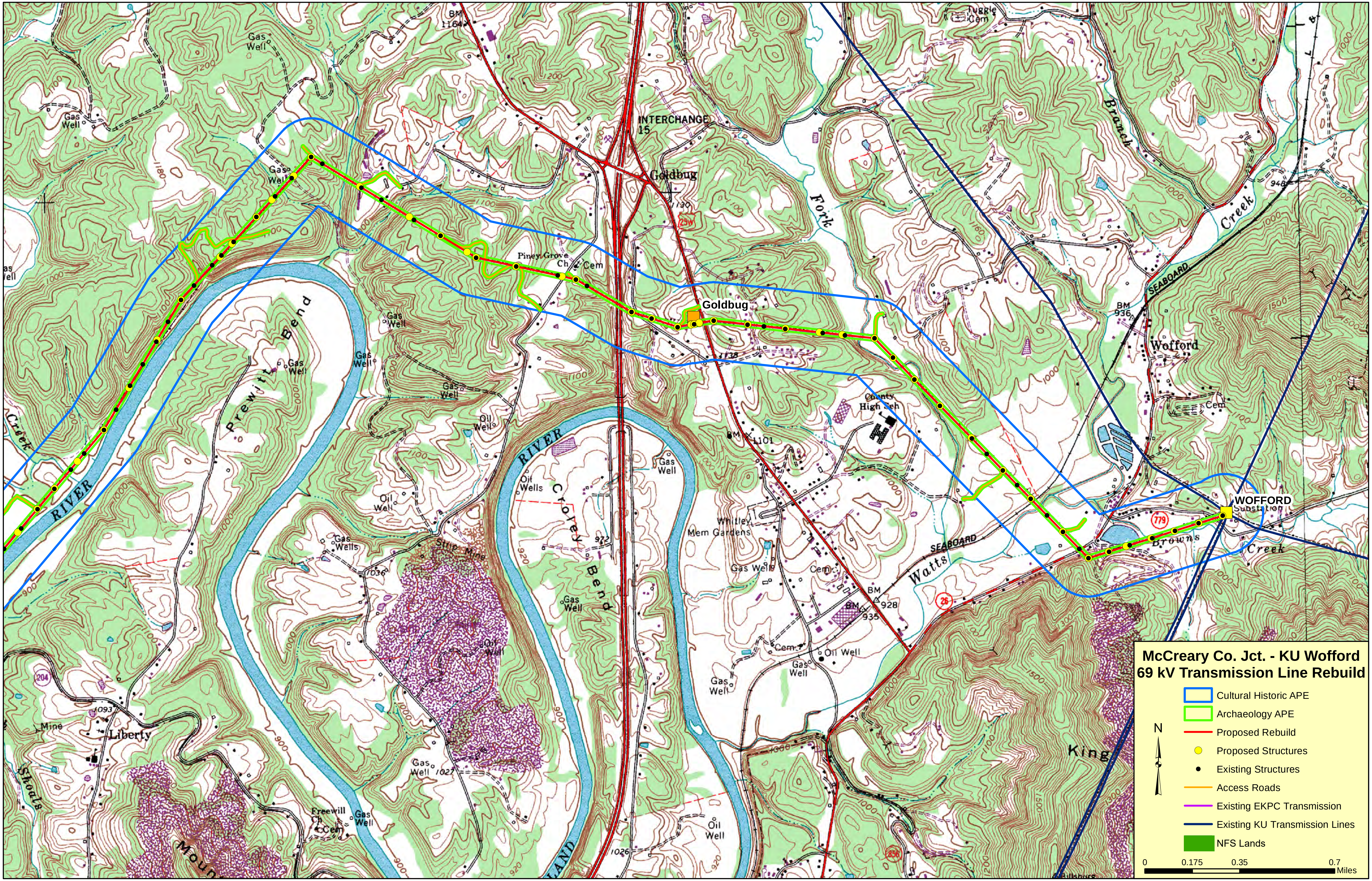

C-1355
C-1476b
C-1408d-I
C-1408d
C-2819
C-1476d
C-1355h-IV
SHOP RIDGE
BEE SHOALS
WHITLEY CITY - WILLIAMSBURG
AY-66
AY-65
AY-64
C-1355
C-1772
C-1355h
AY-63
AY-62
AY-61
AY-60
AY-59
C-2794
AY-58
AY-57
AY-56
AY-55
AY-54
AY-53
DUCKRUN
ROCKY POINT SCHOOL
C-2794a
C-2794a-I
NEW LIBERTY
C-1729
C-1355h-I
C-2798
C-1355
C-3007
C-1552
C-2876
C-1355a
C-1496c
C-870
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
NFS Lands Aerial Map 5 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
National Forest System Lands
N
0
375
750
1,500
Feet


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Cultural Historic APE
Archaeology APE
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
NFS Lands
N
0
0.175
0.35
0.7
Miles
Whitley City
WHITLEY CITY
Indian Knob
Gilreath Cem
D A N I E L B O O N E



McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Cultural Historic APE
Archaeology APE
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
NFS Lands
N
0 0.175 0.35 0.7 Miles
Duck Run
Marsh
Laurel Creek
Caddell Branch
Taylor Branch
Buck Shoals Creek
Bee Shoals
Jacks
New Liberty Ch
Cem
Laurel Cem
Duckrun
WHITLEY CO
MC CREARY CO
Strip Mines


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Cultural Historic APE
Archaeology APE
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
NFS Lands
N
0
0.175
0.35
0.7
Miles
CUMBERLAND
RIVER
Jellico
JELLICO
CREEK
Creek
Redbird
Rough
Shoals
WHITE OAK
ROAD
Steely Cem
Oak Ridge Ch
Archers
Summer Shoals
Shop Br
Branch
Becks Cr
Becks
Peter
STATE WILD RIVER BDY
Strip Mine
D A N I E L



McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Cultural Historic APE
Archaeology APE
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
NFS Lands
N
0
0.175
0.35
0.7
Miles
WOFFORD
Substation
Goldbug
Wofford
INTERCHANGE
15
Piney Grove
Ch
Cem
Prewitt Bend
Croley Bend
RIVER
Liberty
Watts
Browns
Creek
SEABOARD
Whitley
Mem Gardens
County
High Sch
Fork
Branch
Creek
Strip Mine
Freewill
Ch
Cem
Gas Well
Oil Well

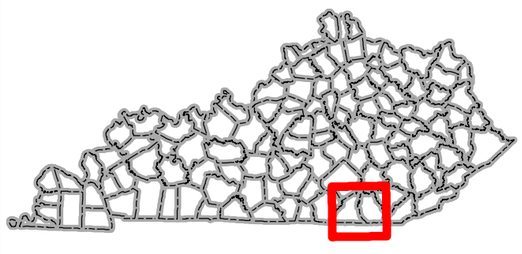
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Project

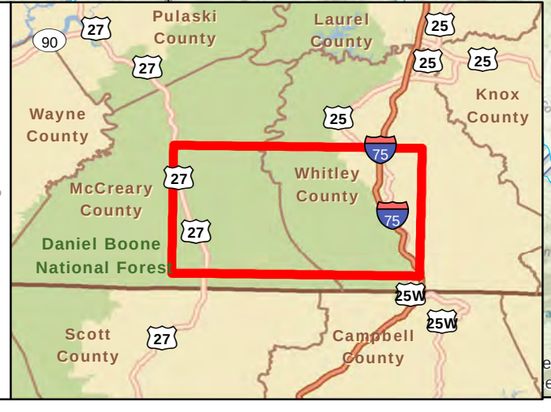
Floodplain Overview Map

- 100-Year Floodplain
- Proposed Rebuild
- EKPC Substations
- Kentucky Utilities (KU) Substations
- Existing EKPC Transmission Lines
- Existing KU Transmission Lines

N

0 1 2 4 Miles





Refer to Map 1

Refer to Map 2

Refer to Map 3

Refer to Map 4

Refer to Map 5

Whitley City

Whitley City

East Pine Knot

McCreary County

Pine Knot

Jellico Creek

Goldbug

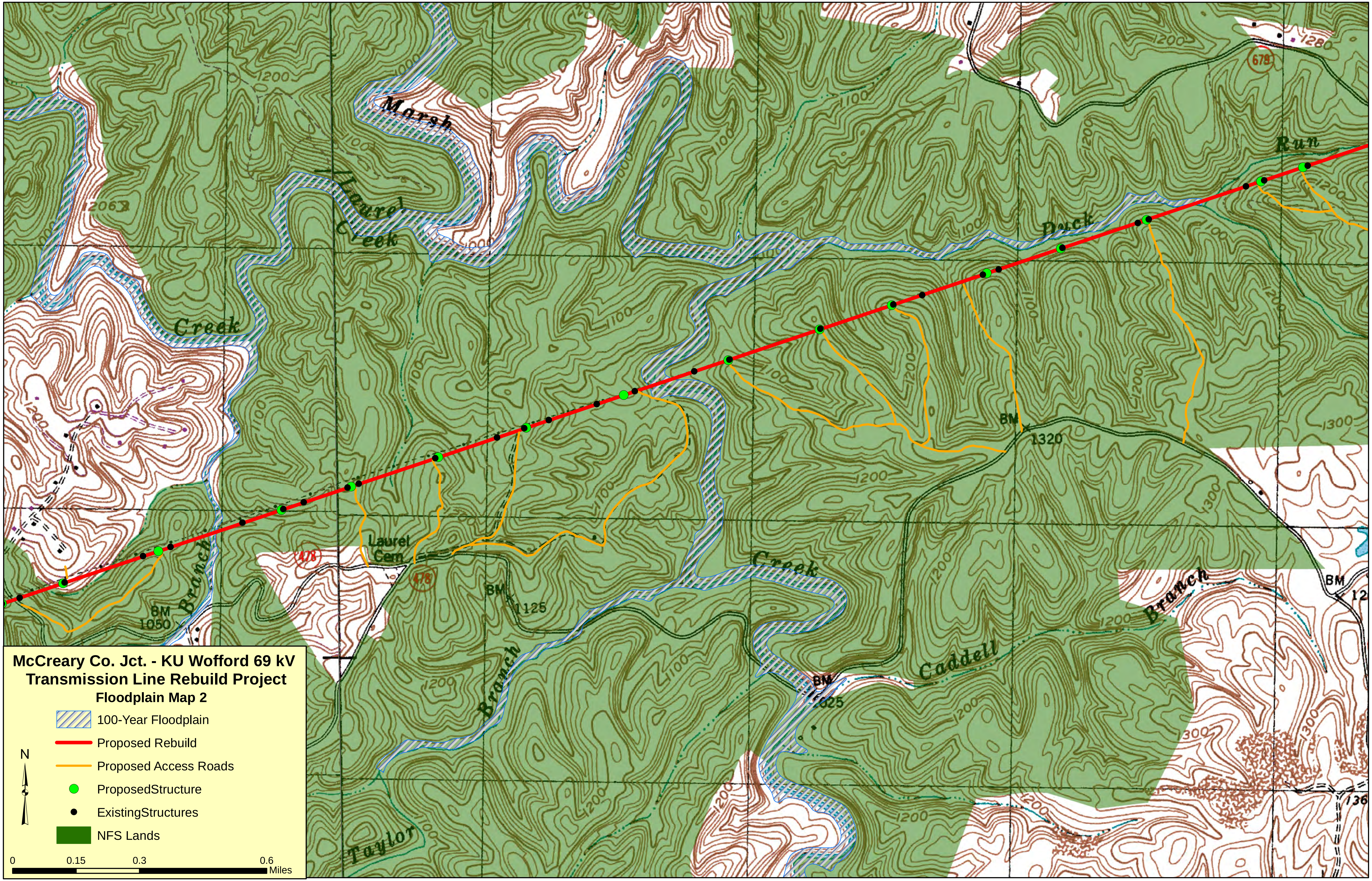
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Project

Floodplain Map 1

- 100-Year Floodplain
- Proposed Rebuild
- Proposed Access Roads
- ProposedStructure
- ExistingStructures
- NFS Lands

N

0 0.15 0.3 0.6 Miles


McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Project
Floodplain Map 2
100-Year Floodplain
Proposed Rebuild
Proposed Access Roads
ProposedStructure
ExistingStructures
NFS Lands
N
0
0.15
0.3
0.6
Miles
Marsh
Laurel
Creek
Creek
Duck
Run
Branch
Laurel
Cem
BM
1050
BM
1125
BM
1320
BM
1025
Creek
Caddell
Branch
Branch
Taylor
478
678

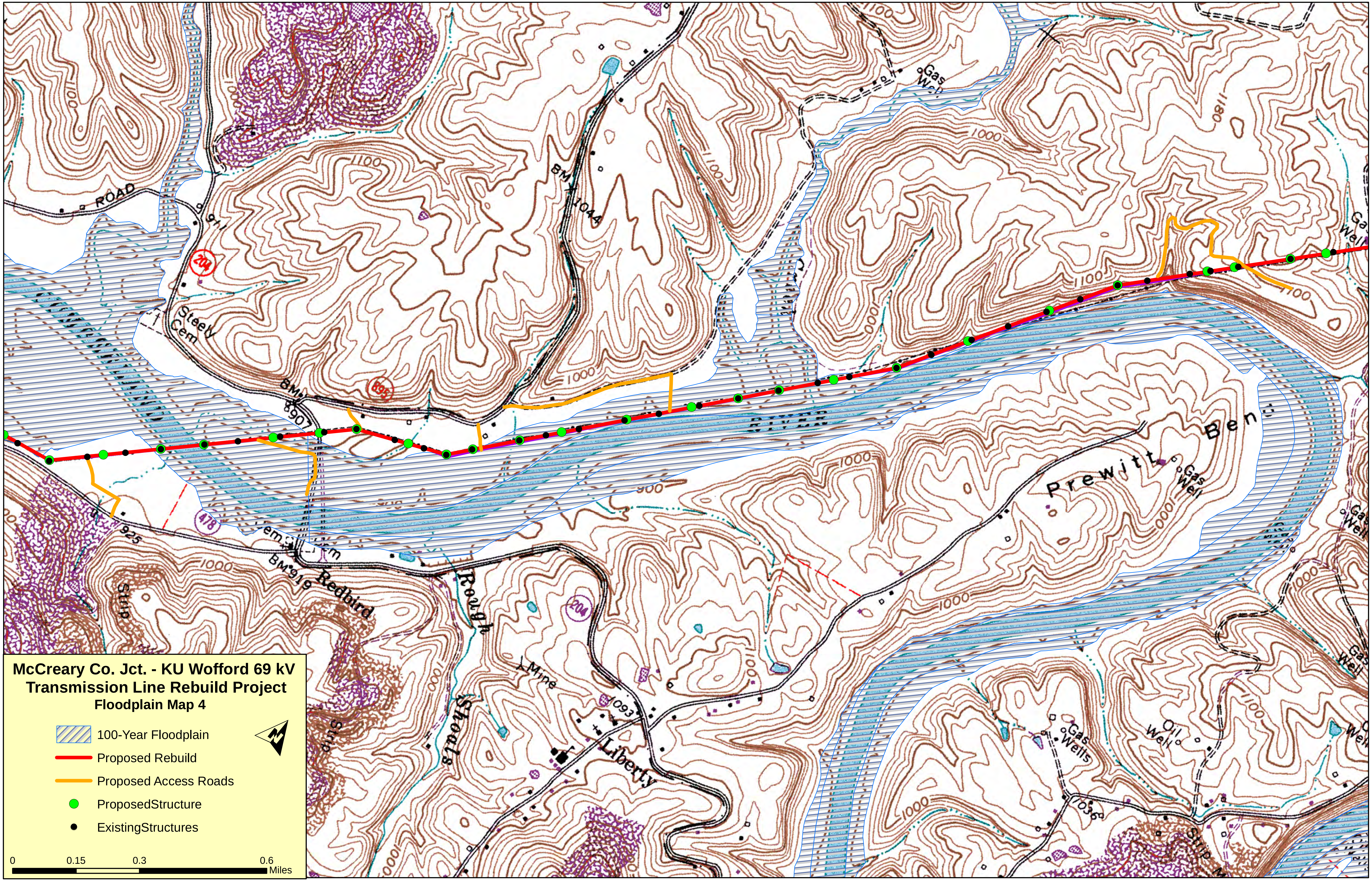
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Project

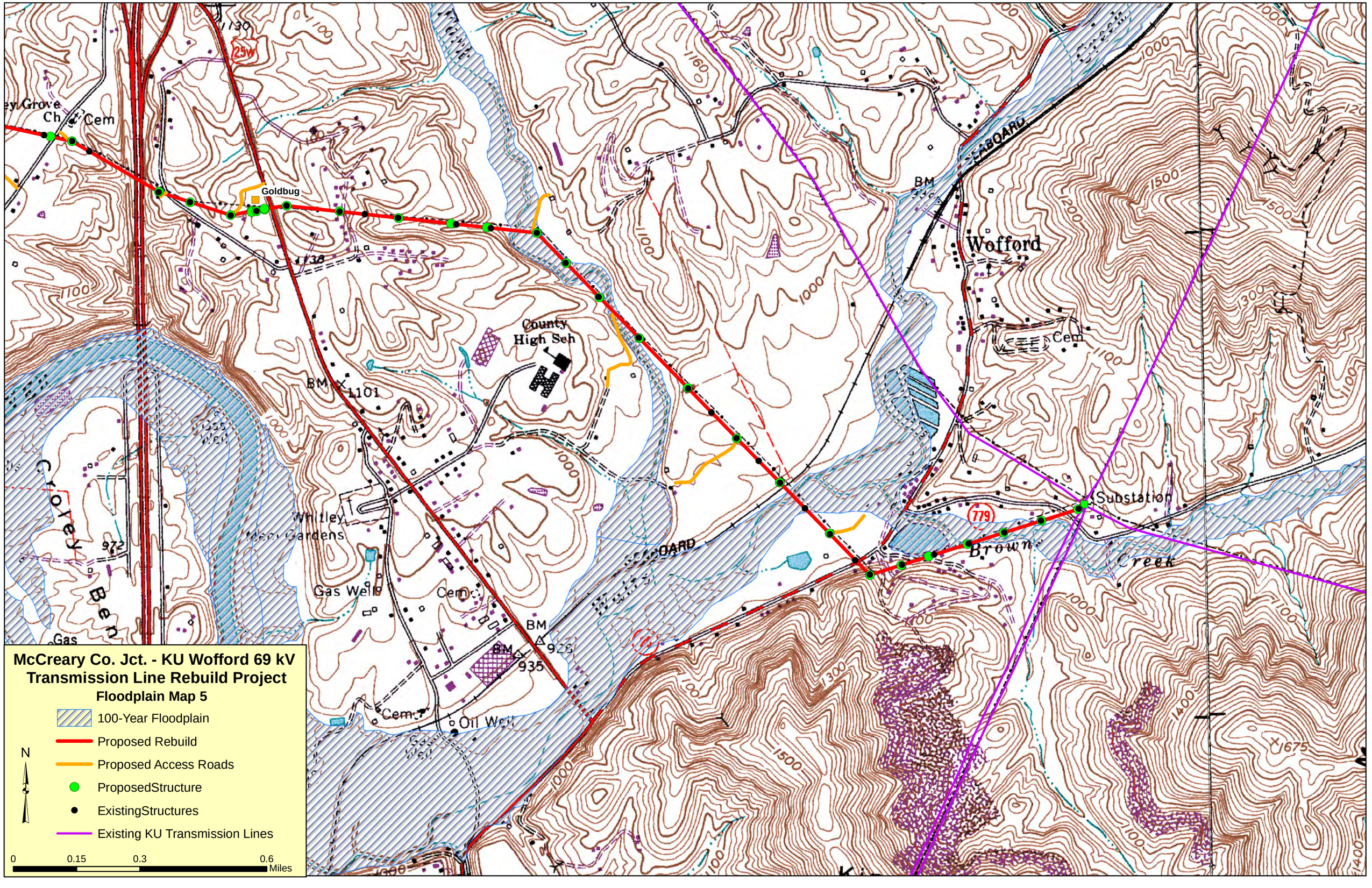
Floodplain Map 3

- 100-Year Floodplain
- Proposed Rebuild
- Proposed Access Roads
- ProposedStructure
- ExistingStructures
- NFS Lands

N

0 0.15 0.3 0.6 Miles


McCreary Co. Jct. - KU Wofford 69 kV
Transmission Line Rebuild Project
Floodplain Map 4
100-Year Floodplain
Proposed Rebuild
Proposed Access Roads
ProposedStructure
ExistingStructures
0
0.15
0.3
0.6
Miles
ROAD
Steely Cem
RIVER
Prewitt Bend
Redbird
Rough Shoals
Liberty
Gas Well
Gas Wells
Oil Well
Mine
Strip
BM 1044
BM 916
1000
1100
900



McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Project

Floodplain Map 5

- 100-Year Floodplain
- Proposed Rebuild
- Proposed Access Roads
- ProposedStructure
- ExistingStructures
- Existing KU Transmission Lines

N

0 0.15 0.3 0.6 Miles

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Stream Crossing/Wetland Avoidance Map 1 of 4

N

- Potential Intermittent Stream Crossings
- T & E Species - No Crossing
- Large Perrenial Streams - No Crossing
- Areas Containing Wetlands
- Proposed Line Rebuild
- Proposed Access Roads

0 0.25 0.5 1 Miles

Whitley City
Jenneys Branch
Jenneys Fork
Laurel Creek
Bridge Fork
Indian Knob
Wright Branch
Golf Course
Stearns
(BM 1351)
Radio Tower
East Apple Tree Branch
Apple Tree Branch
Laurel Bridge Creek
Elisha Branch
Gilreath Cem
East Apple Tree Ch
Substation
DANIEL BOONE

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Stream Crossing/Wetland Avoidance Map 2 of 4

- Potential Intermittent Stream Crossings
- T & E Species - No Crossing
- Large Perrenial Streams - No Crossing
- Areas Containing Wetlands
- Proposed Line Rebuild
- Proposed Access Roads

N

0 0.25 0.5 1 Miles

Duck Run
Peter Branch
Shop Branch
Buck Shoals Creek
Bee Shoals Creek
Jacks Creek
Marsh Creek
Pleasant Run
Caddell Branch
Taylor Branch
Wright Branch
Laurel Creek
New Liberty
New Liberty Ch
Laurel Cem
Duckran
McCREARY CO
WHITLEY CO

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Stream Crossing/Wetland Avoidance Map 3 of 4

N

- Potential Intermittent Stream Crossings
- T & E Species - No Crossing
- Large Perrenial Streams - No Crossing
- Areas Containing Wetlands
- Proposed Line Rebuild
- Proposed Access Roads

0 0.25 0.5 1 Miles

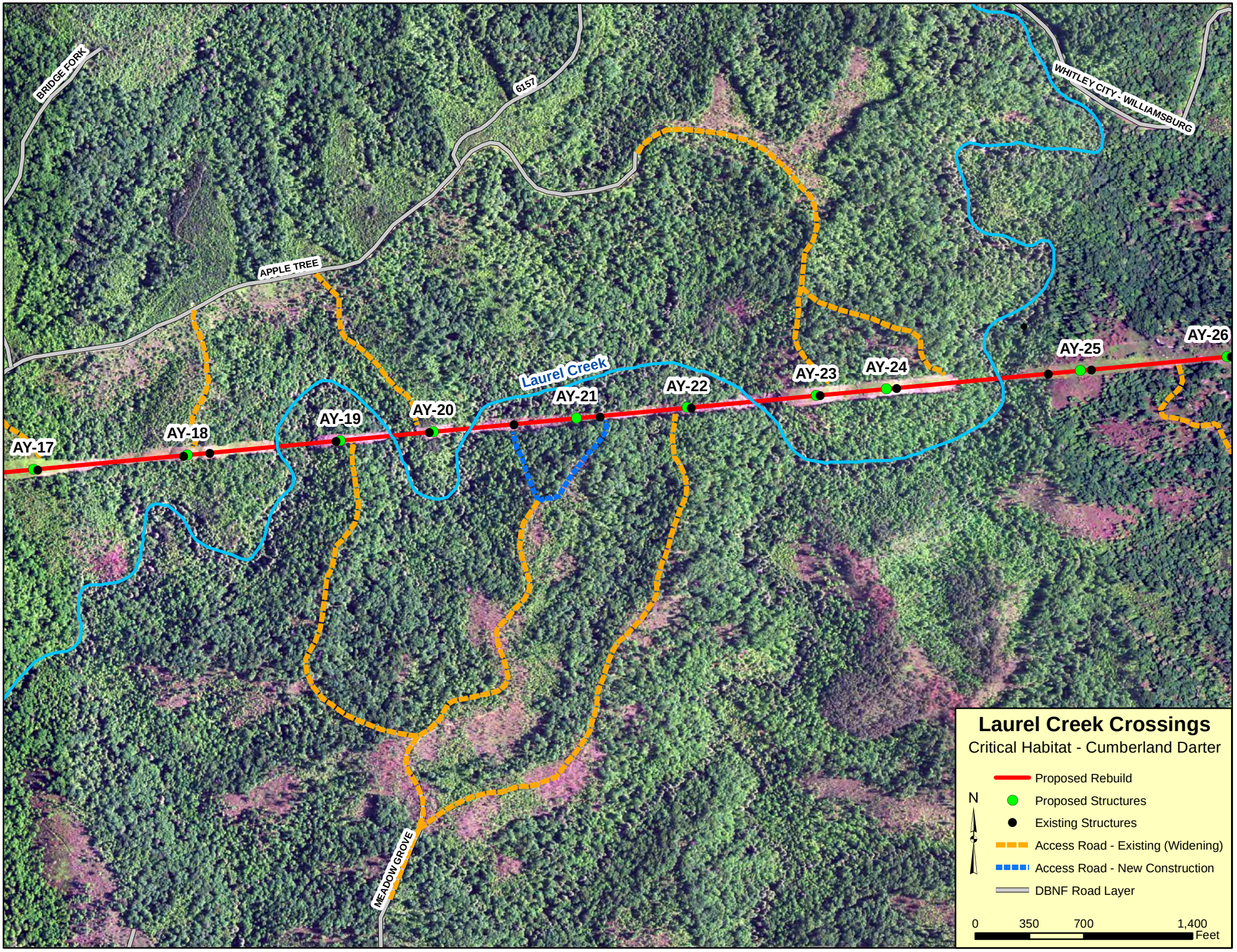
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild

Stream Crossing/Wetland Avoidance Map 4 of 4

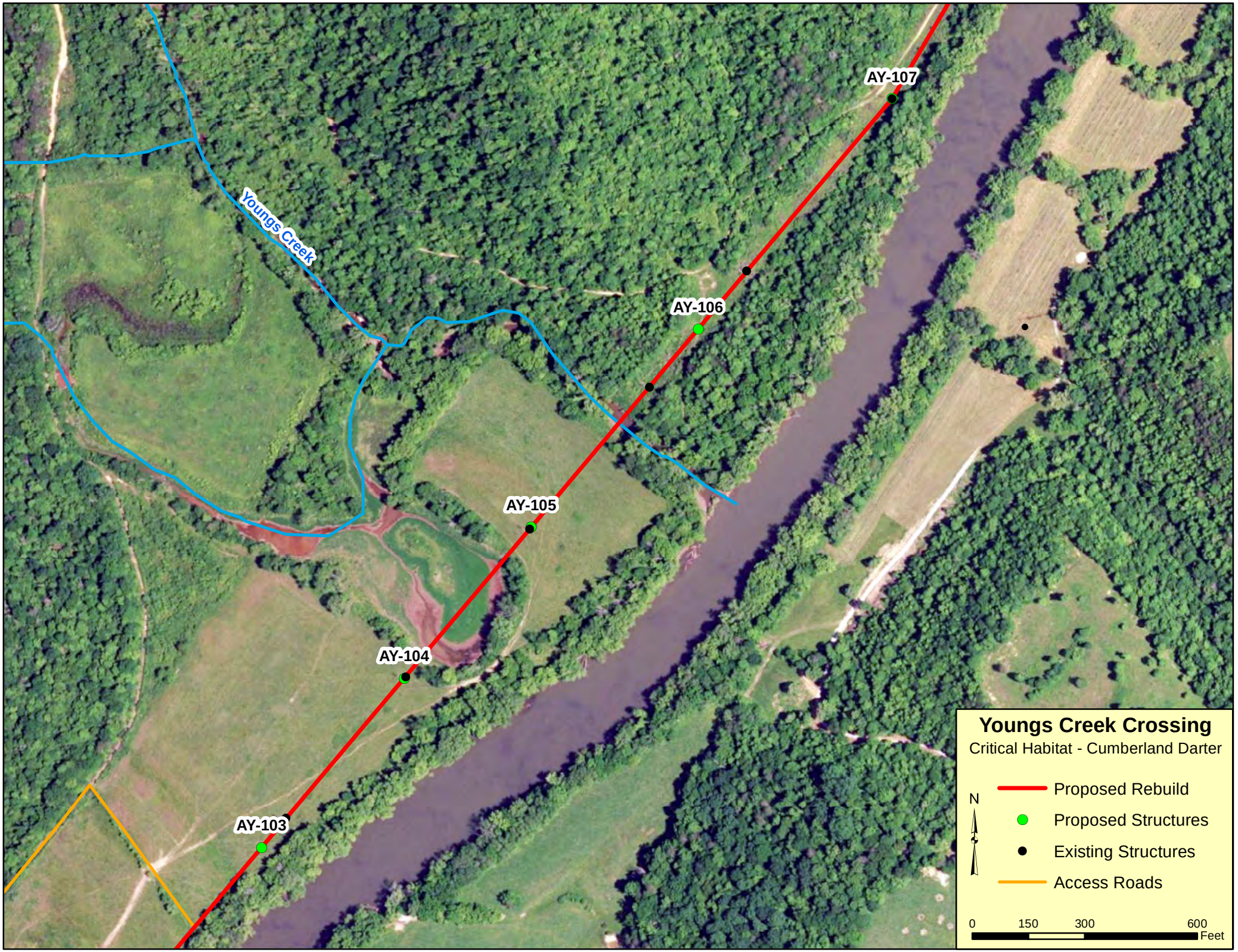
N

- Potential Intermittent Stream Crossings
- T & E Species - No Crossing
- Large Perrenial Streams - No Crossing
- Areas Containing Wetlands
- Proposed Line Rebuild
- Proposed Access Roads

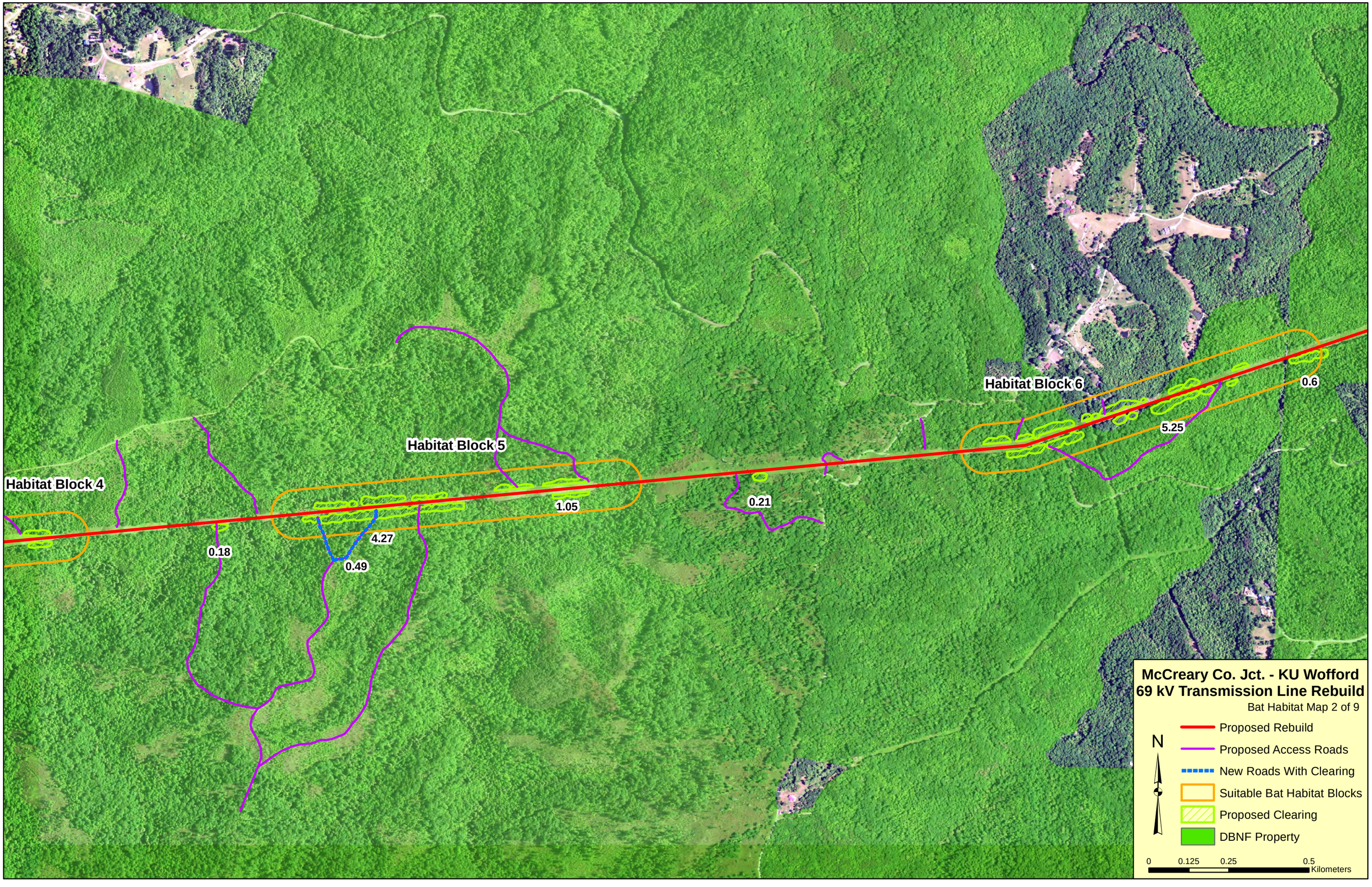
0 0.25 0.5 1 Miles


BRIDGE FORK
6157
WHITLEY CITY - WILLIAMSBURG
APPLE TREE
Laurel Creek
AY-17
AY-18
AY-19
AY-20
AY-21
AY-22
AY-23
AY-24
AY-25
AY-26
MEADOW GROVE
Laurel Creek Crossings
Critical Habitat - Cumberland Darter
Proposed Rebuild
Proposed Structures
Existing Structures
Access Road - Existing (Widening)
Access Road - New Construction
DBNF Road Layer
N
0
350
700
1,400
Feet


AY-38
AY-37
L.WRIGHT
Marsh Creek Crossing
Critical Habitat - Cumberland Elktoe
Proposed Rebuild
Proposed Structures
Existing Structures
Access Road - Existing (Widening)
Access Road - Existing (Clearing)
DBNF Road Layer
N
0
87.5
175
350
Feet


AY-107
Youngs Creek
AY-106
AY-105
AY-104
AY-103
Youngs Creek Crossing
Critical Habitat - Cumberland Darter
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
N
0
150
300
600
Feet


Habitat Block 1
Habitat Block 2
Habitat Block 3
Habitat Block 4
Whitley City
WHITLEY CITY
0.57
1.14
0.9
0.13
0.69
0.49
0.77
0.1
1.09
1.13
0.59
0.29
0.13
5.48
0.09
0.57
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 1 of 9
N
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
0
0.125
0.25
0.5
Kilometers


Habitat Block 6
Habitat Block 5
Habitat Block 4
0.6
5.25
1.05
0.21
4.27
0.18
0.49
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 2 of 9
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
N
0
0.125
0.25
0.5
Kilometers

Habitat Block 9

Habitat Block 8

Habitat Block 7

3.79

0.72

2.01

1.54

0.92

0.91

0.56

0.28

0.6

1.53

0.35

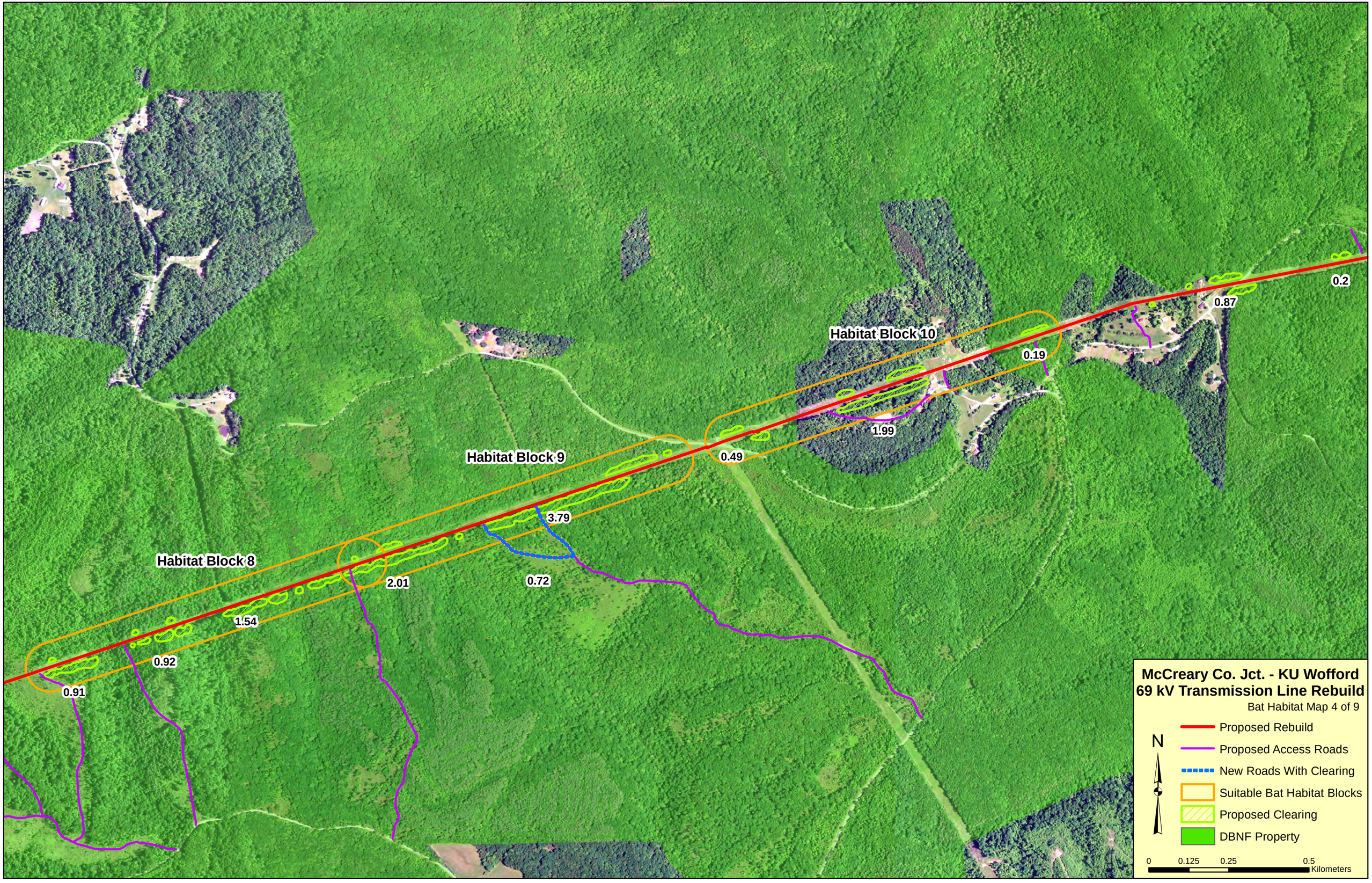
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild

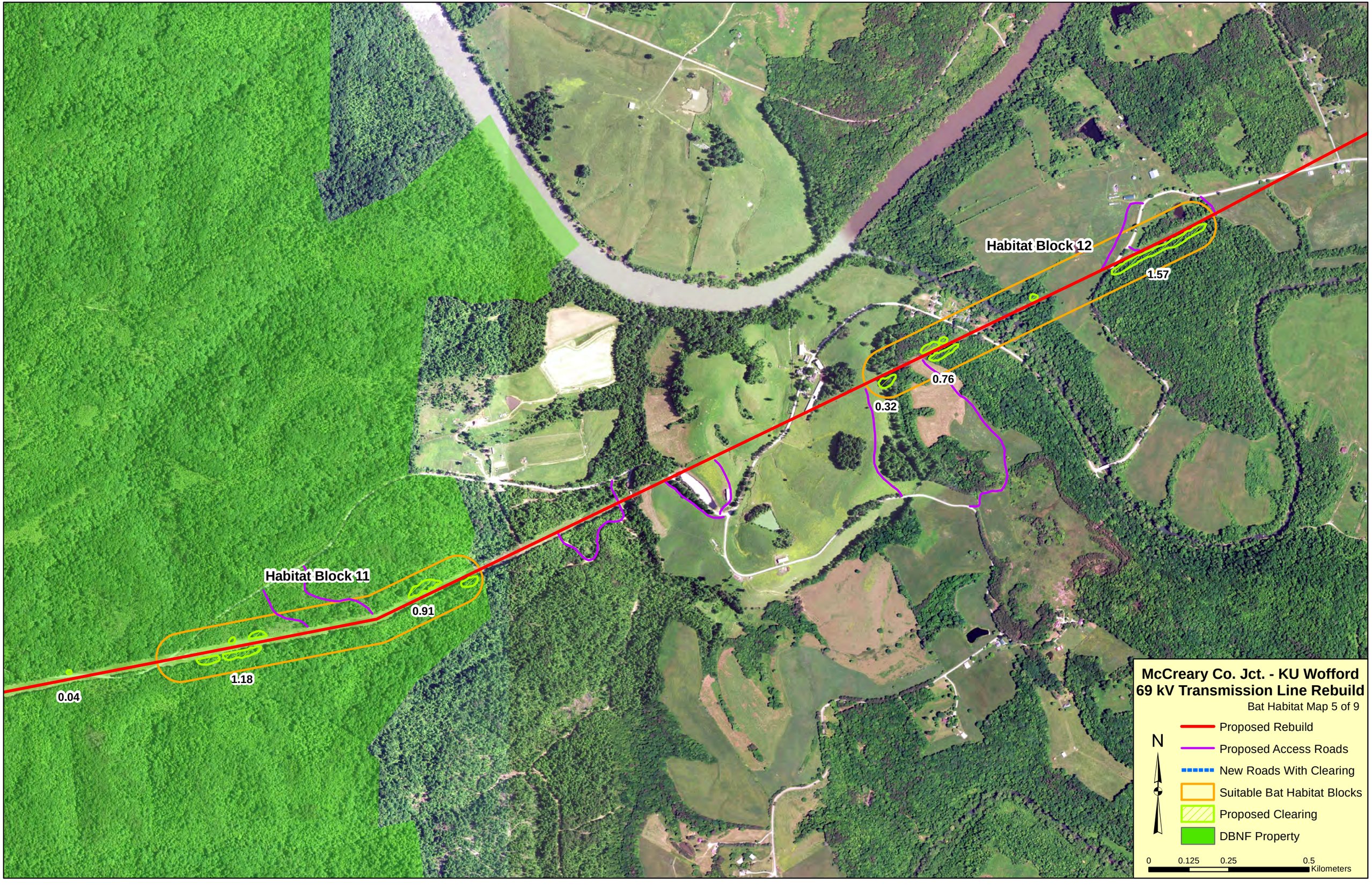
Bat Habitat Map 3 of 9

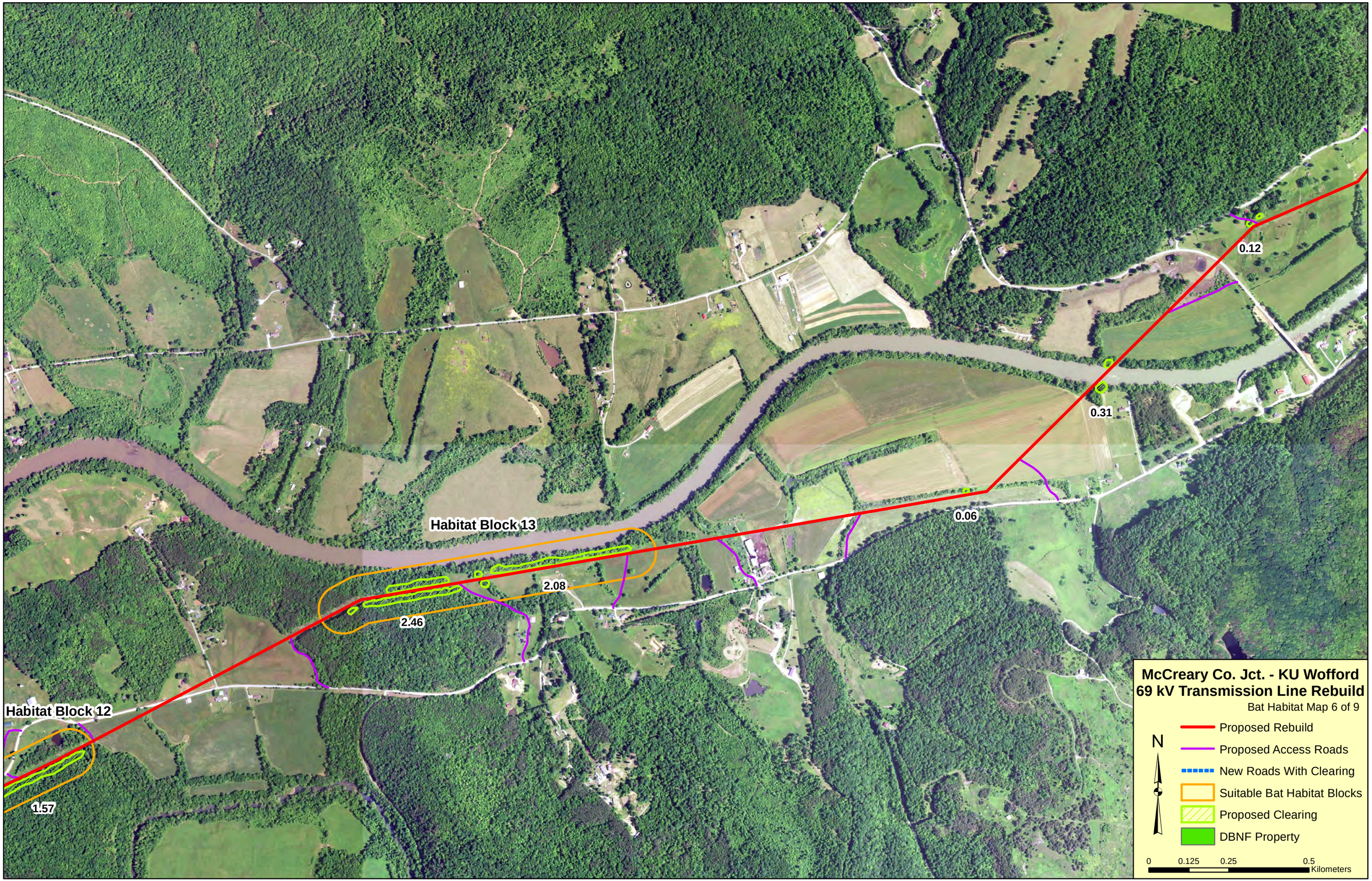
- Proposed Rebuild
- Proposed Access Roads
- New Roads With Clearing
- Suitable Bat Habitat Blocks
- Proposed Clearing
- DBNF Property

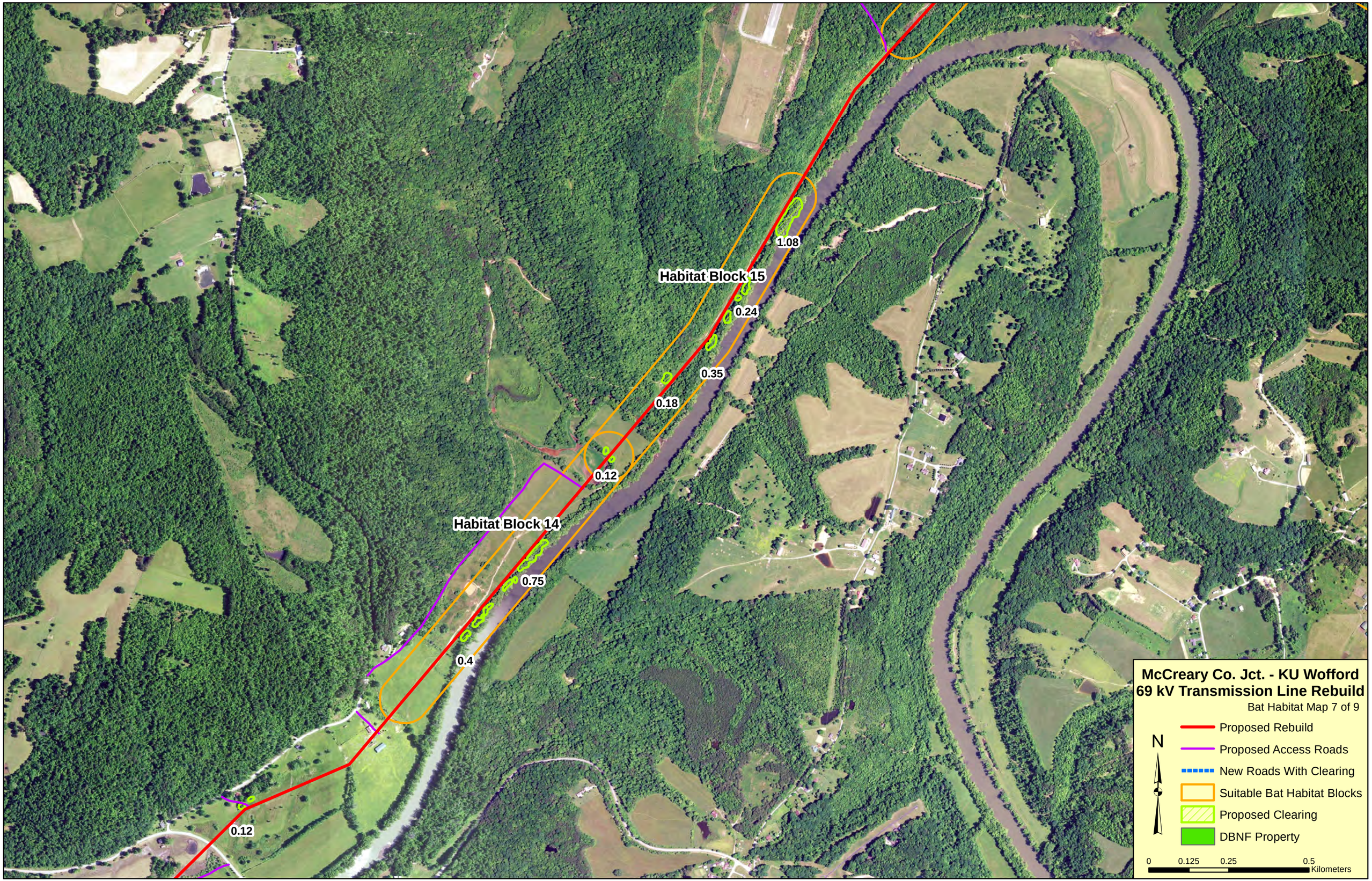
N

0 0.125 0.25 0.5 Kilometers


Habitat Block 10
Habitat Block 9
Habitat Block 8
0.2
0.87
0.19
1.99
0.49
3.79
0.72
2.01
1.54
0.92
0.91
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 4 of 9
N
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
0
0.125
0.25
0.5
Kilometers


Habitat Block 12
1.57
0.76
0.32
Habitat Block 11
0.91
1.18
0.04
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 5 of 9
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
N
0
0.125
0.25
0.5
Kilometers


0.12
0.31
0.06
Habitat Block 13
2.08
2.46
Habitat Block 12
1.57
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 6 of 9
N
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
0
0.125
0.25
0.5
Kilometers


Habitat Block 15
1.08
0.24
0.35
0.18
0.12
Habitat Block 14
0.75
0.4
0.12
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 7 of 9
N
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
0
0.125
0.25
0.5
Kilometers

Habitat Block 16
0.26
4.94
Habitat Block 17
0.73
2.42
1.04
1.08
Habitat Block 15
0.24
0.35
0.18
Habitat Block 14
0.12
0.75

McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 8 of 9

N

- Proposed Rebuild
- Proposed Access Roads
- New Roads With Clearing
- Suitable Bat Habitat Blocks
- Proposed Clearing
- DBNF Property

0 0.125 0.25 0.5 Kilometers

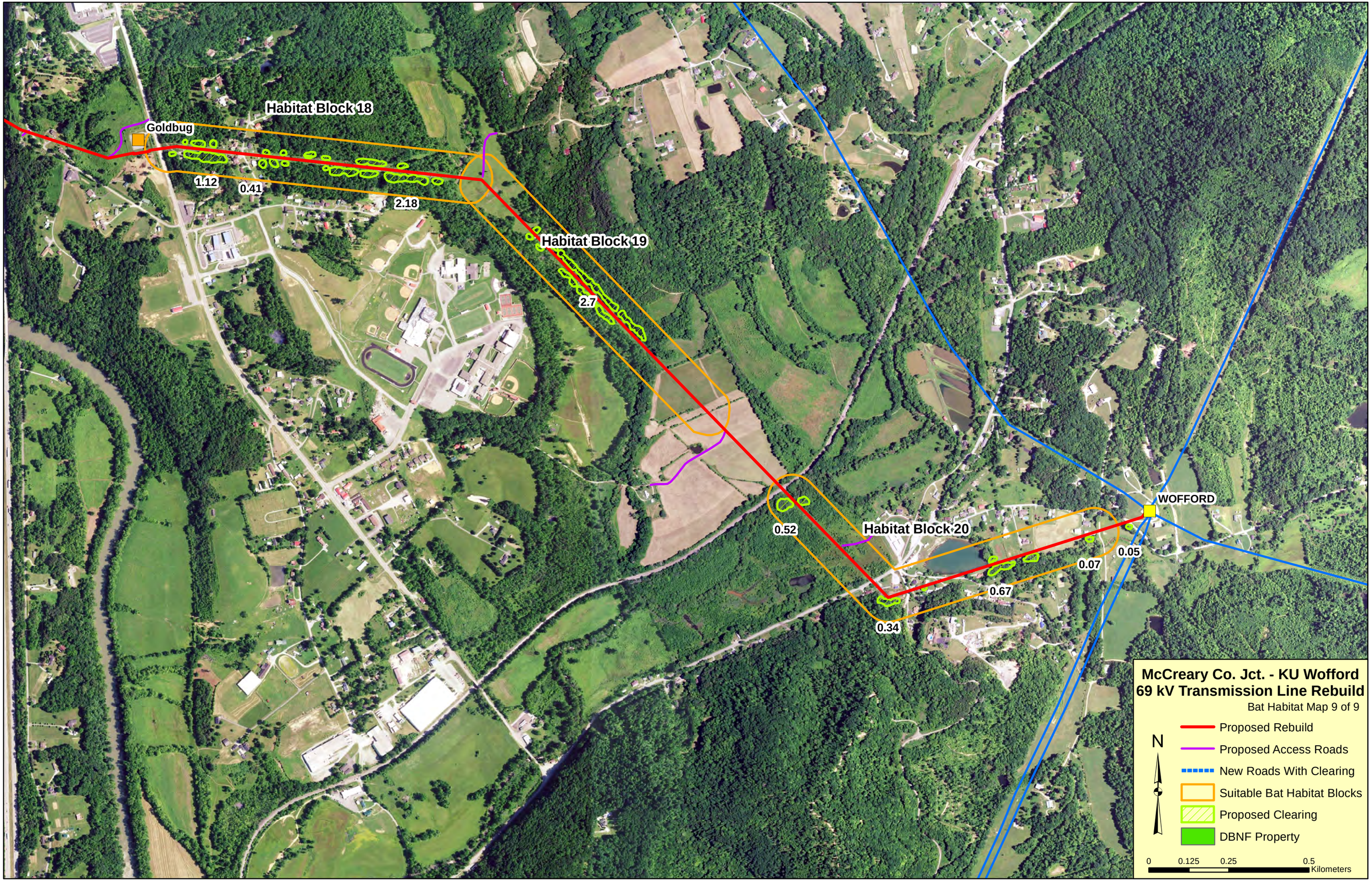

Habitat Block 18
Goldbug
1.12
0.41
2.18
Habitat Block 19
2.7
0.52
Habitat Block 20
0.34
0.67
0.07
0.05
WOFFORD
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Bat Habitat Map 9 of 9
N
Proposed Rebuild
Proposed Access Roads
New Roads With Clearing
Suitable Bat Habitat Blocks
Proposed Clearing
DBNF Property
0
0.125
0.25
0.5
Kilometers

EXHIBIT C. PUBLIC NOTICE

From:	Smith, Laurie A -FS
Bcc:	Bryan_Mills@paul.senate.gov; Karen.kelly@mail.house.gov; bgreene@mccrearycounty.com; "Donna_McClure@mcconnell.senate.gov"; shannon.rickett@mail.house.gov; skelley@pcgovt.com; Carlos.cameron@mail.house.gov; Nick.camic@mail.house.gov; pwhite@2geton.net; "joseph.blanchard@astribe.com"; rdushane@gmail.com; eoosahwee-voss@ukb-nsn.gov; "ckrtstr@yahoo.com"; hollymaustin94@gmail.com; ukbthpo-larue@yahoo.com; Rebecca.Littleton@ky.gov; Bagrim1@uky.edu; Davehh@highland.net; martina.hines@ky.gov; "haganw@somersetwood.com"; judy@kwalliance.org; "lanebold@earthlink.net"; Kimberly.richardson@ky.gov; "a.howell0607@gmail.com"; bob@kfia.org; brent.frazier@ky.gov; "da99333@gmail.com"; ehconyers7900@gmail.com; Jackie.Jones@ky.gov; karen.woodrich@ky.usda.gov; Kate.Slankard@ky.gov; larrygjohnson@prodigy.net; Nott, Tony - NRCS, Winchester, KY; anthony.w.orr@usace.army.mil; Bruce.Scott@ky.gov; pattersonc@berea.edu; dkadoer@yahoo.com; rich.storm@ky.gov; quercusstellata@gmail.com; kentuckyheartwood@gmail.com; director@kwalliance.org; mcwd@mccrearywater.com; Peter.goodmann@ky.gov; "niki_nicholas@nps.gov"; director; fitzkrc@aol.com; Adams, Wayna L -FS; "eugenia@highland.net"; zak.danks@ky.gov; john@sportsmenslink.org; pfinke@att.net; steve.hohmann@ky.gov; wajc@prtcnet.org; James.Wright@ky.gov; spurlockron@gmail.com; jimmya.cantrell@gmail.com; sdobey@rmef.org; kfetters@mrtc.com; Nicolas.Laracuente@ky.gov; chair@kentucky.sierraclub.org; "Conservation@kentucky.sierraclub.org"; wrybka@windstream.net; Ellen52frederick@gmail.com; donna.mcqueary@gmail.com; lesnval@gmail.com; Kevin.Tudor@domtar.com
Subject:	EKPC Special Use Permit STE4062 Amendment Scoping
Date:	Tuesday, June 4, 2019 9:10:00 AM
Attachments:	image001.png image002.png image003.png image004.png

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Please click on the following link for the scoping documents for the EKPC Special Use Permit STE4062 Amendment project. https://www.fs.usda.gov/project/?project=56083

Thank you for your interest in our projects.

Laurie Smith, Certified Forester®
Supervisory Forester

Forest Service
Daniel Boone National Forest, Stearns Ranger District

p: 606-376-5323 x102
f: 606-376-3734
laurie.smith@usda.gov

3320 Hwy 27 North
Whitley City, KY 42653
www.fs.fed.us

Caring for the land and serving people

USDA United States Department of Agriculture | Forest Service | Daniel Boone National Forest
Stearns Ranger District | 3320 Highway 27 North
Whitley City, KY 42653
606-376-5323

File Code: 1950; 2720
Date: June 3, 2019

Dear Reader,

The District Ranger of the Daniel Boone National Forest, Stearns Ranger District is proposing to amend an East Kentucky Power Cooperative, Inc. (EKPC) special use permit for a power transmission line across National Forest System (NFS) lands. You are receiving this letter because you have requested to be notified of such proposals on NFS lands where activities are being proposed. The following information is provided to allow you an opportunity to review and comment on this proposal. This comment period is concurrent with the formal 30-day comment period.

PROPOSED ACTION

The proposed project would include rebuilding the entire 69 kV Transmission Line section located in south-central Whitley and McCreary Counties that has a permitted right-of-way (ROW) width of 100-feet and traverses a total of 20.7-miles. All actual line reconstruction activities would occur within this existing ROW. This section begins at the Whitley City substation on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The section ends at the Wofford substation which is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County (see attached maps).

Approximately 8.6-miles, encompassing 104.2-acres, are located within the Daniel Boone National Forest (DBNF) on the Stearns Ranger District. Access for the proposed reconstruction of the transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement and/or construction of some access roads. Roughly 16.6-miles of access roads, approximately 15 feet in width, would be improved or constructed for the construction and maintenance of the transmission line rebuild project. These access roads would cross approximately 5.6-miles of private land, involving approximately 11.7-acres, and approximately 11.0-miles of National Forest System land, involving approximately 20.0 acres. New construction would occur only on 1.5 miles/2.7 acres. EKPC proposes to maintain woody-stemmed vegetation within the ROW through the use of low-volume, selective herbicide treatment every three to five years. Vegetation may also be maintained through a combination of manual and mechanical methods within environmentally sensitive areas.

The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place with steel-pole structures, within the existing 100-footwide ROW easement. Currently the existing ROW is maintained in low growing herbaceous plant cover. No tree removal is necessary within the existing ROW. However, following construction activities, EKPC will identify and clear any danger trees located along the edges of the

transmission line ROW easement that have the potential to threaten the future operation of the facility. Merchantable trees would be marked, appraised and billed to EKPC through a settlement sale.

The access roads would be improved/constructed with the assistance of heavy equipment, such as a bulldozer or skidder. Erosion would be controlled along the new access roads by using best management practices. Seed, lime, fertilizer and mulch would be applied to exposed soil areas as needed. Water bars and dips would also be installed in the roads along with silt fences and staked straw bales to aid in preventing erosion. Gravel or crushed stone would be applied to road surfaces, as needed, to prevent rutting. All transmission line access roads would be maintained for administrative use only.

The Non-Restricted Use Herbicides, listed by their active ingredients, which are being proposed to aid in controlling vegetation growth on the proposed electric transmission line ROW include aminopyralid, imazapyr, and triclopyr. These chemicals are approved for use as stipulated through labeling requirements by the U.S. Environmental Protection Agency (EPA). Different formulations of the technical acids of each chemical are created to facilitate the ease of use and increase the efficacy of these products.

The proposed chemical mixture of the herbicide would be water based with a soybean oil surfactant added to aid the herbicide in adhering to the plant foliage. The rate of herbicide application would be the lowest effective rate approved by USFS to meet the proposed objective. The maximum application rate for the proposed chemicals would be ten gallons of herbicide mix per acre and the proposed formulation rates are as follows:

The following formulations would be used:

- Aminopyralid (Milestone – 2 lbs a.e./gal), or 5.46% a.i.
- Imazapyr AC (Arsenal AC – 4 lbs a.e./gal), or 2.0% a.i.
- Triclopyr 3A (Garlon 3A – 3 lbs a.e./gal; amine formulation), or 11.4% a.i.
- Enhance (Surfactant derived from soybean oil) – 64 ounces or 0.5%

McCreary County Jct. – KU Wofford Transmission Line Herbicide Use Prescription

	Routine Cyclical Treatments
Number of Treatments:	Periodic while under permit
Approximate Timing:	Approximately every 3 to 5 years
Approximate Acres NFS land to treat:	104.2
Approx. Acres of private land to treat:	146.7
Treatment Method:	Manual directed foliar
Time of Year:	May - October

Solution Mixture per 100 gallon	
Aminopyralid, oz. [lbs. a.i./acre]	7 [2]
Enhance (surfactant), oz.	64
Imazapyr AC, oz. [lbs. a.i./acre]	64 [4]
Triclopyr 3A, oz. [lbs. a.i./acre]	384 [3]
Application (Gallons of mixture/acre)	10

Applicable *Forestwide Standards* as outlined in the *Forest Plan* would be followed for the handling and application of the proposed herbicides on the new ROW. A Pesticide Use Proposal would be prepared by EKPC for approval by the Forest Service prior to each year's application. The standards that would be implemented include: a restriction of herbicide mixing, loading or cleaning areas in the field within 200 feet of private land, open water, wells or other sensitive areas; weather conditions would be monitored prior to and during herbicide applications, and such applications would be suspended if temperature, humidity and wind conditions become unfavorable as defined by the above-mentioned document; a restriction of a soil-active herbicide application within 60 feet of any known listed or proposed endangered or threatened plant species; a restriction of herbicide applications within 30 horizontal feet of lakes, wetlands, perennial or intermittent springs and streams; hose end sprayers would use large droplet nozzles and be applied with low volume backpacks; and signs noticing the herbicide applications would be placed near areas of public use on NFS lands, such as, roads, and hiking trails.

Purpose of and Need for Action

The purpose of this transmission line rebuild project is to improve system reliability by improving the physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The EKPC Reliability team assessed the McCreary County Jct. – KU Wofford line section and determined that the existing McCreary County Jct. – KU Wofford 69 kV transmission line section warranted replacement. The outage probability of this line section is expected to be considerably higher than for other lines on the EKPC system. Based on the identified need to address reliability concerns associated with the poor physical condition of the existing transmission line section, concluded that the existing support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor (795 ACSR/TW) currently utilized by EKPC. Therefore, a complete rebuild of the McCreary County Jct. – KU Wofford transmission line section using steel pole structures was determined to be the most cost effective long-term solution. Rebuilding this line section with larger conductor will not only improve the physical condition of the line, it would also provide increased conductor thermal rating, increased voltage support for normal and contingency conditions, address reliability concerns, and reduce conductor losses. Rebuilding this line section will also ensure the facility is brought up to date and is compliant with 8 current federal National Electric Safety Codes. These additional benefits would ultimately result in future cost savings for EKPC's Owner-Members. Because the proposed project

would be located completely within an existing facility, any alternatives to the current route could potentially affect a larger area, cost more to construct, affect more property owners, and have greater environmental impacts. Therefore, the existing ROW route was the only alternative considered for the McCreary County Jct. – KU Wofford transmission line rebuild project.

This decision is being implemented to make progress toward the Forest's goals for management, as described in the *Land and Resource Management Plan for the Daniel Boone National Forest* (Forest Plan). Forest Plan goals and standards relevant to the project are listed below:

- GOAL 7 Provide a sustainable mix of desired uses, valued characteristics, and services to improve the long-term benefit to local communities and the public. (Forest Plan, p. 2-15).
- DB-LAND-2 - Evaluate special use proposals/applications to determine if they are in the public interest. Proposals/applications must:
  a. Be consistent with Prescription Area Objectives, Standards, and Desired Future Conditions
  b. Be consistent with other federal, state, and local statutes and regulations
  c. Not be permitted on DBNF land if they can ben be reasonably accommodated on private land, even if those locations are more expensive for the applicant. (Forest Plan, p. 2-20)

Decision to be Made and Responsible Official

The District Ranger of the Stearns Ranger District, Daniel Boone National Forest is the Responsible Official for this proposal. The Responsible Official will decide whether or not to implement the proposed action of amending EKPC's special use permit. The proposed project would receive financing assistance from the USDA, Rural Utilities Service (RUS). The decision to be made by the Administrator of RUS is whether to grant the financing assistance in relation to the proposed project.

Scoping and Public Involvement

Scoping for this project includes public notification of the proposal and a review of the management direction for the area in the Forest Plan, review of the National Forest Management Act, and consultations with Forest Service and other agency resource specialists. This letter is also being distributed to individuals and groups who have requested to be notified of new project proposals. Planning documents can be found on the Forest Service web site at:
http://www.fs.usda.gov/projects/dbnf/landmanagement/projects

You can help in the planning process by sharing any concerns or information you may have about these proposals. The Forest Service will use your comments to help determine the appropriate scope of environmental analysis to conduct. Comments submitted will become part of the public record.

The opportunity to comment ends 30 days following the date of publication of the legal notice in The McCreary County Voice. It is the responsibility of all individuals and organizations to ensure that their

comments are received in a timely manner. This decision will be subject to the objection procedures identified in §219 Subpart B. For objection eligibility (§219.53), only those who have submitted substantive formal written comments during any designated opportunity for public comment may file an objection.

Comments received in response to this solicitation, including names and addresses of those who comment, will be considered part of the public record on these proposed actions and will be available for public inspection. Comments submitted anonymously will be accepted and considered; however, anonymous comments will not provide the agency with the ability to provide the respondent with subsequent environmental documents or standing for administrative review.

How to Submit Comments

Written comments can be mailed to:

Tim Reed, District Ranger, Stearns Ranger District, 3320 Hwy 27 N, Whitley City, KY 42653 or Faxed to: 606-376-3734.

Electronic comments must be submitted online at
https://cara.ecosystem-management.org/Public//CommentInput?Project=56083
or in a common digital format to *comments-southern-daniel-boone-stearns@fs.fed.us*

To ensure that they are considered, oral or hand-delivered comments must be received at the Stearns Ranger Station during normal business hours from 8:00 a.m. to 4:30 p.m. For submitting oral comments by telephone, call (606)376-5323 and identify the purpose of your call. The receptionist will connect you with someone who will document your comments.

Additional Information

For additional information on the project, please contact Laurie Smith at laurie.smith@usda.gov or by calling (606)376-5323.

Sincerely,

/s/ Timothy Reed
TIMOTHY REED
District Ranger

Enclosures

Special Use Permit No. 4062 - Coverage Area

Goldbug

WOFFORD

WILLIAMSBURG

ROPER PLANT

WILLIAMSBURG SOUTH

Whitley City

East Pine Knot

Jellico Creek

REVELO

McCreary County

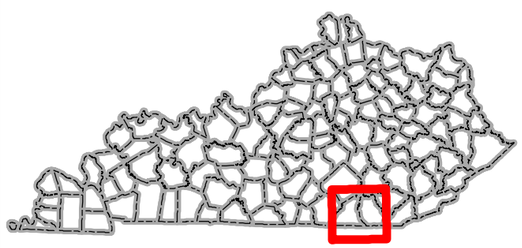
Pine Knot

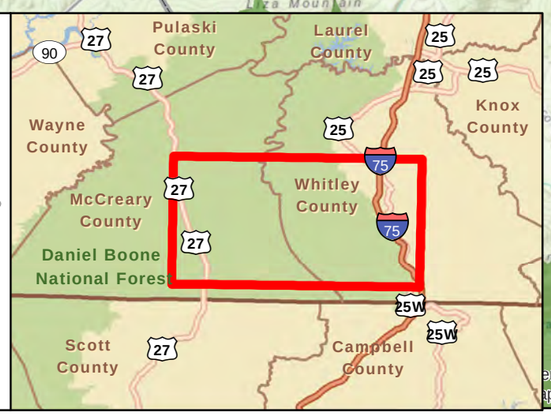
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild Overview Map

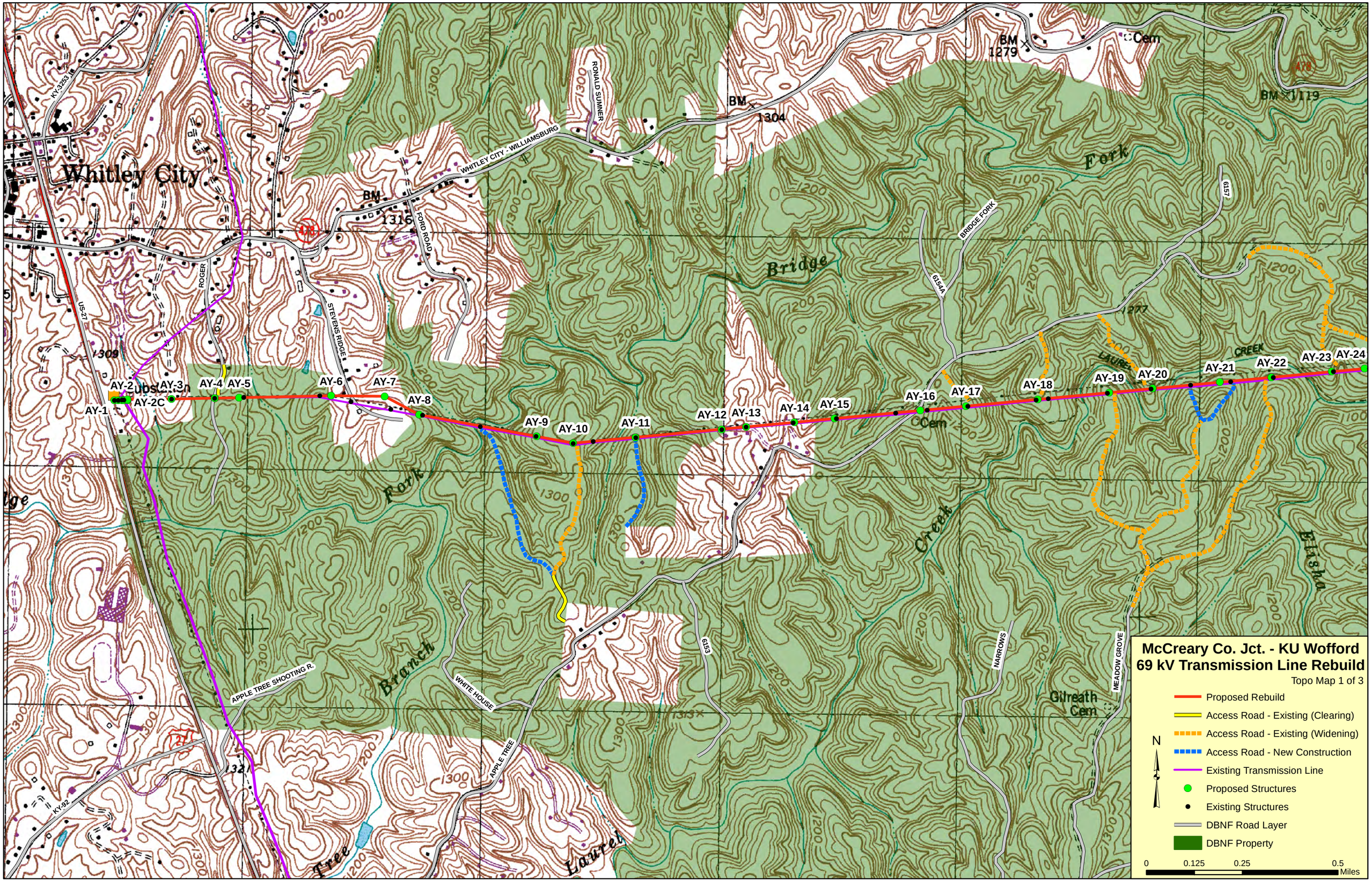
- Proposed Rebuild
- DBNF Property
- Existing EKPC Transmission Lines
- Existing KU Transmission Lines
- EKPC Substations
- Kentucky Utilities (KU) Substations

N

0 1 2 4 Miles







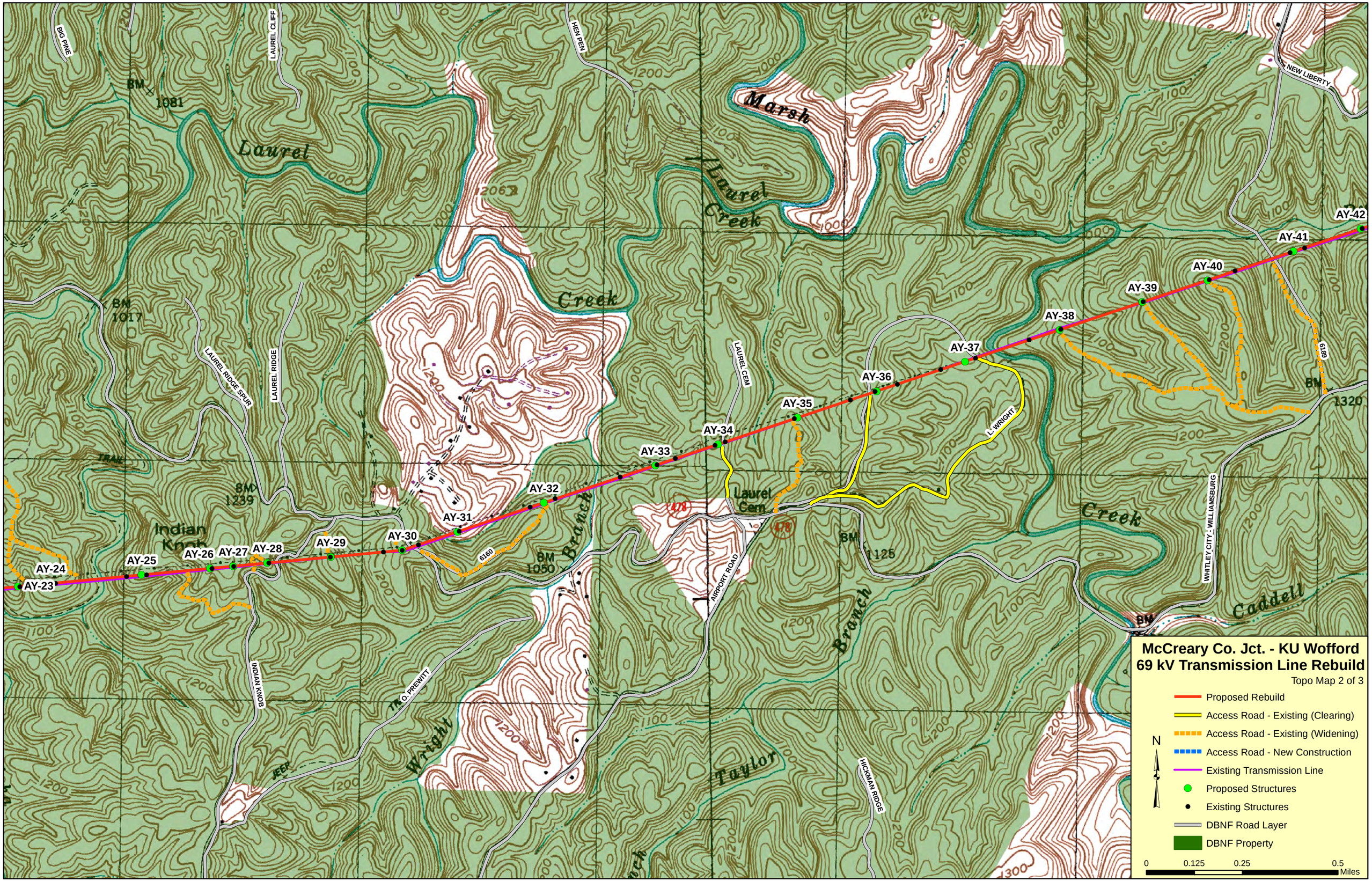
McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Topo Map 1 of 3

- Proposed Rebuild
- Access Road - Existing (Clearing)
- Access Road - Existing (Widening)
- Access Road - New Construction
- Existing Transmission Line
- Proposed Structures
- Existing Structures
- DBNF Road Layer
- DBNF Property

N

0 0.125 0.25 0.5 Miles


AY-23
AY-24
AY-25
AY-26
AY-27
AY-28
AY-29
AY-30
AY-31
AY-32
AY-33
AY-34
AY-35
AY-36
AY-37
AY-38
AY-39
AY-40
AY-41
AY-42
BIG PINE
LAUREL CLIFF
HEN PEN
NEW LIBERTY
LAUREL RIDGE SPUR
LAUREL RIDGE
LAUREL CEM
L. WRIGHT
INDIAN KNOB
T.O. PREWITT
AIRPORT ROAD
HICKMAN RIDGE
WHITLEY CITY - WILLIAMSBURG
6160
6189
478
BM 1081
BM 1017
BM 1239
BM 1050
BM 1125
BM 1320
Laurel
Creek
Marsh
Indian Knob
Laurel Cem
Wright
Taylor
Caddell
Branch
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Topo Map 2 of 3
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
DBNF Property
N
0
0.125
0.25
0.5
Miles

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

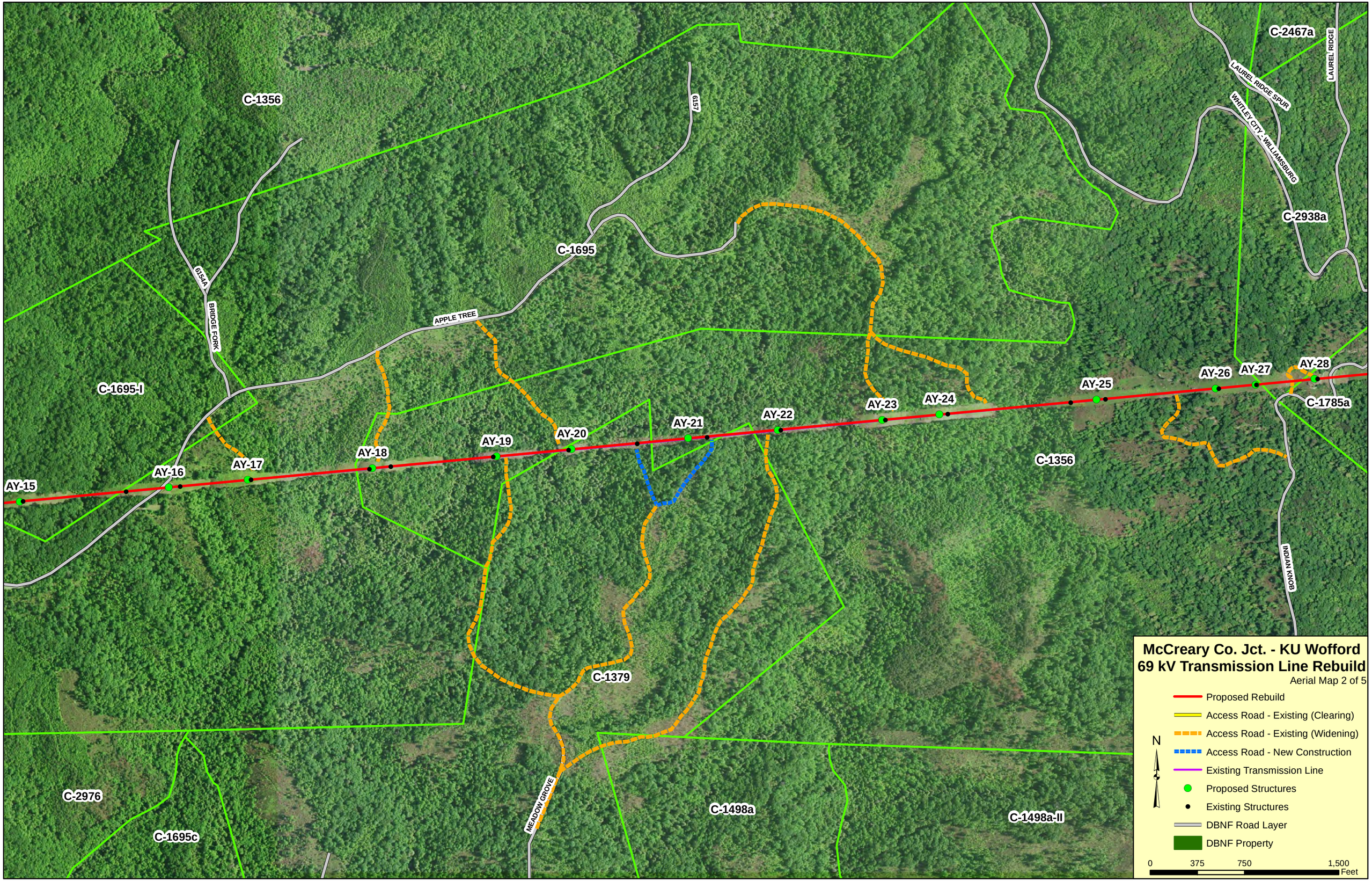
Topo Map 3 of 3

- Proposed Rebuild
- Access Road - Existing (Clearing)
- Access Road - Existing (Widening)
- Access Road - New Construction
- Existing Transmission Line
- Proposed Structures
- Existing Structures
- DBNF Road Layer
- DBNF Property

N

0 0.125 0.25 0.5 Miles


WHITLEY CITY - WILLIAMSBURG
FORD ROAD
ROGER
STEVENS RIDGE
Whitley City
AY-1
AY-2
AY-2B
AY-3
AY-4
AY-5
AY-6
AY-7
AY-8
AY-9
AY-10
AY-11
AY-12
AY-13
AY-14
AY-15
C-1356
C-1695-I
C-1695
C-2944
C-2851b
C-4200
C-1257
US-27
WHITE HOUSE
APPLE TREE
6153
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Aerial Map 1 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
DBNF Property
N
0
375
750
1,500
Feet


C-1356
6157
C-2467a
LAUREL RIDGE
LAUREL RIDGE SPUR
WHITLEY CITY - WILLIAMSBURG
C-2938a
C-1695
6154A
BRIDGE FORK
APPLE TREE
C-1695-I
AY-15
AY-16
AY-17
AY-18
AY-19
AY-20
AY-21
AY-22
AY-23
AY-24
AY-25
AY-26
AY-27
AY-28
C-1785a
C-1356
INDIAN KNOB
C-1379
C-2976
C-1695c
MEADOW GROVE
C-1498a
C-1498a-II
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Aerial Map 2 of 5
Proposed Rebuild
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
Existing Transmission Line
Proposed Structures
Existing Structures
DBNF Road Layer
DBNF Property
N
0
375
750
1,500
Feet

C-1785-I
C-1785-I
C-1356b
C-1785
C-44a
C-928
C-2467a
C-1355p
LAUREL RIDGE
AY-38
C-2892
AY-37
C-1355q-I
C-1355o
AY-36
LAUREL CEM
C-832a
AY-35
AY-34
L. WRIGHT
C-2938a
C-1355n
AY-33
C-903d
AY-32
WHITLEY CITY - WILLIAMSBURG
C-1355q
C-1585
AY-31
INDIAN KNOB
AY-30
AY-29
6160
C-1785a
ARPORT ROAD
C-1586
C-1355m
C-1356
O. PREWITT
C-832
C-1586-I

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Aerial Map 3 of 5

- Proposed Rebuild
- Access Road - Existing (Clearing)
- Access Road - Existing (Widening)
- Access Road - New Construction
- Existing Transmission Line
- Proposed Structures
- Existing Structures
- DBNF Road Layer
- DBNF Property

N

0 375 750 1,500 Feet

C-1051b
C-1771a
C-928
C-3001
NEW LIBERTY
AY-52
AY-50
AY-51
AY-49
AY-46
AY-48
AY-47
AY-45
AY-44
AY-43
AY-42
C-1745
6191
C-1733a
6189
AY-41
C-1355p
AY-40
AY-39
C-2892
AY-38
C-1355
C-3004
C-1585-I
C-1585-II
C-1759-I
WHITLEY CITY - WILLIAMSBURG
C-1355n
C-1585
C-1759
C-903d

McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Aerial Map 4 of 5

- Proposed Rebuild
- Access Road - Existing (Clearing)
- Access Road - Existing (Widening)
- Access Road - New Construction
- Existing Transmission Line
- Proposed Structures
- Existing Structures
- DBNF Road Layer
- DBNF Property

N

0 375 750 1,500 Feet


C-1355
C-1476b
C-1408d-I
SHOP RIDGE
C-1408d
C-3053a
C-2819
C-1355h-IV
WHITLEY CITY - WILLIAMSBURG
C-1476d
DUCKRUN
BEE SHOALS
C-1355
C-1772
C-1355h
AY-66
AY-65
AY-64
AY-63
AY-62
AY-61
AY-60
AY-59
AY-58
AY-57
AY-56
AY-55
AY-54
AY-53
C-2794
C-1729
C-1355h-I
C-2798
C-2794a-I
NEW LIBERTY
ROCKY POINT SCHOOL
C-1552
C-2876
C-3007
McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Aerial Map 5 of 5
Existing Structures
Proposed Structures
Proposed Rebuild
Existing Transmission Line
Access Road - Existing (Clearing)
Access Road - Existing (Widening)
Access Road - New Construction
DBNF Road Layer
DBNF Property
N
0
375
750
1,500
Feet

Josh Young

From: Smith, Laurie A -FS <laurie.smith@usda.gov>
Sent: Wednesday, July 10, 2019 9:26 AM
To: Josh Young
Subject: FW: McCreary Co. Jct. - KU Wofford 69kV Transmission Line Rebuild

Laurie Smith, Certified Forester®
Supervisory Forester
Forest Service
Daniel Boone National Forest, Stearns Ranger District
p: 606-376-5323 x102
f: 606-376-3734
laurie.smith@usda.gov
3320 Hwy 27 North
Whitley City, KY 42653
www.fs.fed.us

Caring for the land and serving people

From: Vadala, Carin E -FS
Sent: Wednesday, July 10, 2019 8:52 AM
To: Smith, Laurie A -FS <laurie.smith@usda.gov>
Subject: RE: McCreary Co. Jct. - KU Wofford 69kV Transmission Line Rebuild

I think these are pretty simple to address. I'm still checking with the region on whether Dan would also sign the EA since he will sign the permit. Their direction isn't very clear but I think that's where they are leaning. An EA could consider another alternative but since no other comments were submitted and Paul didn't suggest anything else to consider, we wouldn't need to do that unless some issues arise internally that would lead us to consider another alternative.

I think they can clarify the proposed project is the entire line but the proposed action analyzed in NEPA is on the actions on FS land. Then they could describe actions on existing roads, whether they'd be gated or not, and actions for building new access roads. Road management level could be identified as well.
They would do a PUP every year and use the risk analysis to analyze the types and amounts of herbicide, but I think the PUP is a requirement of the permit and doesn't need to be in the EA. Maybe check with Shiloh on that.

Carin Vadala, PhD
Forest Planner and Environmental Coordinator
Forest Service
Daniel Boone National Forest
p: 859-745-3151
carin.e.vadala@usda.gov
1700 Bypass Rd
Lexington, KY 40509
www.fs.fed.us

Caring for the land and serving people

From: Smith, Laurie A -FS
Sent: Wednesday, July 10, 2019 8:40 AM
To: Vadala, Carin E -FS <carin.e.vadala@usda.gov>
Subject: FW: McCreary Co. Jct. - KU Wofford 69kV Transmission Line Rebuild

Laurie Smith, Certified Forester®
Supervisory Forester
Forest Service
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Whitley City, KY 42653
www.fs.fed.us

Caring for the land and serving people

From: Paul Finke [mailto:pfinke@att.net]
Sent: Thursday, June 13, 2019 7:40 AM
To: Smith, Laurie A -FS <laurie.smith@usda.gov>
Subject: McCreary Co. Jct. - KU Wofford 69kV Transmission Line Rebuild

Hi Laurie,
Hope all is well with you.

I bet you miss my "red-ink" reviews of documents. Ha!
I have some comments and suggestions for future consideration.

1. Has the district ranger been delegated the authority to approve this level of special use permit? In the past this type of decision was only delegated to the Forest Supervisor.

2. It appears the FS is the lead agency and RUS will use this analysis to make their decision on federal funding. The PROPOSED ACTION does not include financing by RUS, yet it appears in the DECISION TO BE MADE. The proposal can and should include an agencies funding.

3. There's a difference between a "proposed project" and a "proposed action". The proposed project or "OVERVIEW" would include the entire length of line and associated activities. Each agency, FS and RUS both have different "Proposed Actions" to consider when making a decision. I think you tried to do this, but it's not clear in the document. You could split the PROPOSED ACTION into two sections; the proposal the FS is responsible for, and the proposal the RUS is responsible for. It should be clear that the Forest Service decision only applies to those activities occurring on NFS lands.

5. In the PROPOSED ACTION, there's a statement that EKPC proposes to maintain woody-stemmed.... This should be stated similar to other actions. (i.e. Woody-stemmed vegetation would be maintained/controlled through the....)

6. Access roads paragraph in the PROPOSED ACTION, does this apply to all access roads? Even those outside of the FS permit area? And, does Administrative Use only, mean the roads will be gated? If so, then proposed gates ad locations should appear on the maps.

7. In the PROPOSED ACTION, it appears a Pesticide Use Proposal will be submitted to the FS each year for approval for the entire length of line. That appears to be outside of FS authority.

8. Are you preparing an EA? Or, does this proposal fall under a Categorical Exclusion?

9. I thought the PURPOSE and NEED was good. The determination that "the existing ROW route was the only alternative considered for the McCreary County Jct. - KU Wofford transmission line rebuild project". Scoping is done to help determine the scope of analysis and the need to consider alternatives to the proposal. I know there are requirements for considering alternatives when considering an application for special use permit, and the selected alternative at that time becomes the PROPOSED ACTION. Alternatives could and should be considered during environmental analysis, consistent with NEPA direction. I think this one sentence in a scoping document is confusing.

10. Map LEGEND - DBNF Properties should say "National Forest System lands.

11. Is OHV/ATV use occurring illegally in the area on existing access roads and the power line corridor? Action should be taken to discourage use through gating, etc.

12. What FS Service-Level will these roads be managed as? If they will not receive appropriate maintenance, they should be closed; either obliterated or gated.

Best of Luck

Paul Finke

EXHIBIT D. AGENCY CORRESPONDENCE

USFS/RUS Lead/Cooperating Agency Correspondence

Chris Carpenter

From: Chris Carpenter
Sent: Tuesday, May 7, 2019 1:06 PM
To: 'Pedley, Perri - NRCS, Mayfield, KY'
Cc: Josh Young
Subject: Data request for proposed McCreary County Junction-KU Wofford 69 kV Transmission Line Rebuild
Attachments: McCrearyCoJct-KUWofford_Project Maps(r).pdf; EKPC_McCreary County Jct-KU Wofford Transmission Line Rebuild Shapefiles.zip

Good afternoon Ms. Pedley,

EKPC is proposing to rebuild the existing McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres.
The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. In addition, there would be 16.6 miles of proposed access roads, approximately 15-ft wide that would be located outside of the existing 100-foot wide transmission line corridor.

As part of our review process, we kindly request the acreage of prime farmland that may be impacted as a result of constructing this project, and any recommendations you may have to minimize/avoid these effects. EKPC would also like to know if the project would impact any hydric soils or areas designated as floodplain. Attached are project maps showing the location of the project, as well as shapefiles of the proposed transmission line and access roads area of potential effect.

Thank you very much for your help. If you need any additional information or wish to discuss this project please do not hesitate to contact myself, or Josh Young at (859) 745-9799 and josh.young@ekpc.coop.

Have a great week,

Chris Carpenter
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9805
Cell: (859) 771-0764
chris.carpenter@ekpc.coop

United States Department of Agriculture

Natural Resources Conservation Service
USDA Service Center
1000 Commonwealth Drive
Mayfield, KY 42066

May 15, 2019

Chris Carpenter
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391

RE: McCreary County Junction—KU Wofford 69 kV Transmission Line Rebuild

Dear Mr. Carpenter:

In response to your request from 5/7/2019 regarding the transmission line rebuild project in McCreary and Whitley Counties, Kentucky, the Natural Resources Conservation Service (NRCS) has no congressional authority for conducting Environmental Assessments (EA).

NRCS is mandated to provide information on the soils and/or impact to farmland according to the Farmland Protection Policy Act (P.L. 97-98) for projects that will be utilizing federal monies.

Based on the information contained in your cover letter and accompanying maps, no conversion of agricultural lands (*prime, unique, or farmland of local or statewide importance*) will occur or be negatively impacted by the proposed undertaking. This is due to the fact that your project is located within previous easements and/or ground that is too steeply sloped to be important farmland. Therefore, this office has no additional concerns at this time.

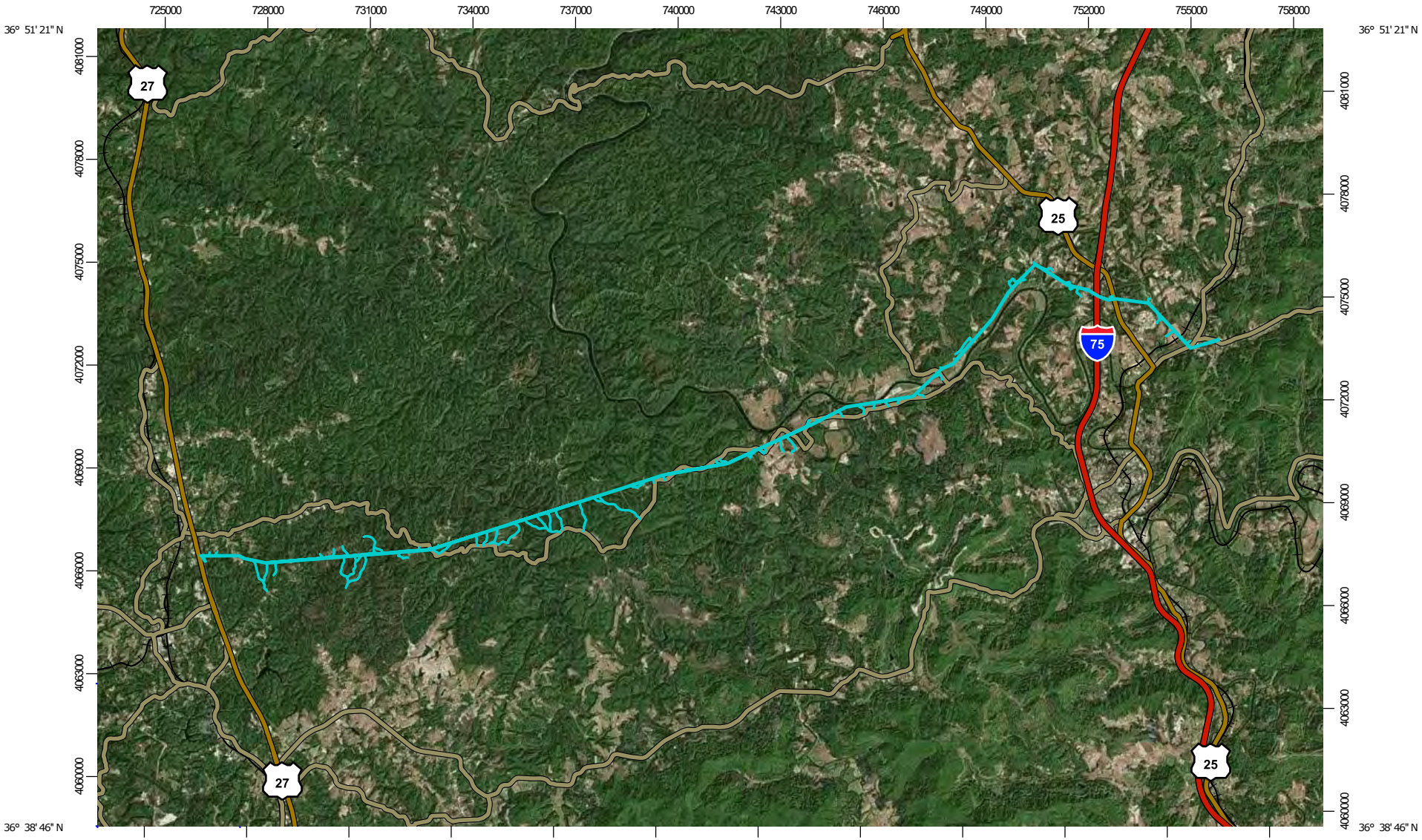
Best Wishes with the success of your project, and if we may be of additional assistance please do not hesitate to contact us.

Sincerely,

Perri Pedley

Perri Pedley
Soil Scientist
Perri. Pedley@ky.usda.gov

Hydric Rating by Map Unit—Knox and Eastern Part of Whitley Counties, Kentucky, and McCreary-Whitley Area, Kentucky



Map Scale: 1:164,000 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 2000 4000 8000 12000

Feet
0 5000 10000 20000 30000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at scales ranging from 1:15,800 to 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Knox and Eastern Part of Whitley Counties, Kentucky
Survey Area Data: Version 19, Sep 16, 2019

Soil Survey Area: McCreary-Whitley Area, Kentucky
Survey Area Data: Version 18, Sep 16, 2019

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jan 1, 1999—Dec 31, 2003

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Bo	Bonnie silt loam, frequently flooded	90	1.2	0.2%
ClB	Clarkrange silt loam, 2 to 6 percent slopes	0	3.7	0.8%
Co	Cotaco loam, rarely flooded	0	0.6	0.1%
Cu	Cuba silt loam, frequently flooded	0	2.0	0.4%
LaD	Latham silt loam, 12 to 20 percent slopes	0	0.3	0.1%
Mo	Morehead silt loam, rarely flooded	0	1.7	0.3%
ShB	Shelocta gravelly silt loam, 2 to 6 percent slopes	0	2.5	0.5%
ShD	Shelocta gravelly silt loam, 12 to 20 percent slopes	0	0.0	0.0%
SLE	Shelocta-Latham silt loams, 20 to 30 percent slopes	0	2.2	0.5%
SLF	Shelocta-Latham complex, 30 to 60 percent slopes, stony	0	16.4	3.5%
St	Stendal silt loam, frequently flooded	3	12.3	2.6%
uUduD	Udorthents-Urban land complex, 2 to 25 percent slopes	0	0.4	0.1%
W	Water	0	0.6	0.1%
WnB	Wernock silt loam, 2 to 6 percent slopes	0	1.6	0.3%
WnC	Wernock silt loam, 6 to 12 percent slopes	0	6.3	1.3%
Subtotals for Soil Survey Area			**52.0**	**10.9%**
Totals for Area of Interest			**475.6**	**100.0%**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
3D	Wernock-Sequoia complex, 12 to 25 percent slopes	0	57.5	12.1%

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4C	Sequoia-Wernock complex, 6 to 12 percent slopes	0	10.9	2.3%
9F	Bethesda and Fairpoint soils, 20 to 70 percent slopes	0	0.5	0.1%
11F	Shelocta-Highsplint-Sequoia complex, 30 to 80 percent slopes, rocky	0	191.9	40.4%
15	Pope soils, 0 to 4 percent slopes, frequently flooded	4	7.3	1.5%
22E	Shelocta-Sequoia complex, 20 to 35 percent slopes, rocky	0	50.4	10.6%
26B	Captina silt loam, 2 to 6 percent slopes	5	21.4	4.5%
28	Cotaco silt loam	5	0.5	0.1%
30	Atkins-Stokly complex, 0 to 3 percent slopes, frequently flooded	45	17.8	3.8%
64	Robertsville silt loam	90	9.3	2.0%
uAllC	Allegheny loam, 6 to 12 percent slopes	0	1.7	0.4%
uAlnB	Allegheny loam, 2 to 6 percent slopes, rarely flooded	0	20.7	4.3%
Ud	Udorthents soils	0	0.4	0.1%
uShrF	Shelocta-Highsplint-Rigley complex, 30 to 50 percent slopes, stony, rocky	0	28.8	6.0%
uWhtB	Whitley silt loam, 2 to 6 percent slopes, rarely flooded	3	1.6	0.3%
W	Water	0	2.8	0.6%
Subtotals for Soil Survey Area			**423.5**	**89.1%**
Totals for Area of Interest			**475.6**	**100.0%**

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

EAST KENTUCKY POWER COOPERATIVE

September 10, 2019

Floodplain Management Section
Division of Water
300 Sower Boulevard
Frankfort, KY 40601

RE: Application for Stream Construction Permit for the Proposed McCreary County Junction – KU Wofford 69 kV Transmission Line Project

To Whom It May Concern:

East Kentucky Power Cooperative, Inc. (EKPC) is pleased to submit the enclosed Stream Construction Permit application for construction activities within the designated floodplains for the proposed McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kilovolt (kV) transmission line rebuild project in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County.

The EKPC Reliability Team identified the need to replace the McCreary County Jct. – KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (3/0 ASCR) with a larger size conductor (795 ACSR-TW) currently utilized by EKPC. EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor. Therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

The existing transmission line would be dismantled and the new line constructed in its place, within the existing 100-foot wide right-of-way easement. Based on the preliminary engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet. Existing floodplain data indicates 24 of these structures would be installed within the designated floodplains of the Cumberland River (20 new structures replacing 27 existing

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707
Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

structures), Blake Fork (two new structures replacing two existing structures), Watts Creek (0 new structure replacing 1 existing structure), and Browns Creek (2 new structures replacing 3 existing structures,). Following construction of the new transmission line, the existing transmission line section will be removed, resulting in the removal of 33 structures from the floodplains. This will result in the net loss of nine structures from the designated floodplains within the project area. Additional details of the proposed project can be found in the enclosed permit application.

If you have any questions or need additional information, please feel free to contact me at (859) 745-9799 or by email at *josh.young@ekpc.coop*.

Sincerely,

Josh Young
Supervisor Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis (EKPC)
Brad Young (EKPC)
Ronnie Terrill (EKPC)

COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER

APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM AND / OR WATER QUALITY CERTIFICATION

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. *If the project involves work in a stream, such as bank stabilization, dredging or relocation, a 401 Water Quality Certification (WQC) from the Division of Water will be required.* This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, A Notice of Intent for Storm Water Discharges will also be required. Forms can be obtained at http://water.ky.gov/permitting/pages/generalpermits.aspx

1. **OWNER:** Ronnie Terrill, East Kentucky Power Cooperative, Inc.
   Give name of person(s), company, governmental unit, or other owner of proposed project.

   MAILING ADDRESS: 4775 Lexington Road
   Winchester, Kentucky 40391

   TELEPHONE #: (859) 745-9594 **EMAIL:** ronnie.terrill@ekpc.coop

2. **AGENT:** Josh Young, East Kentucky Power Cooperative
   Give name of person(s) submitting application, if other than owner.

   ADDRESS: Same as above **TELEPHONE #:** 859-745-9799 **EMAIL:** josh.young@ekpc.coop

3. **ENGINEER:** Bradford Arthur Young **P.E. NUMBER:** 22625
   Contact Division of Water if waiver can be granted.

   TELEPHONE #: (859) 745-9287 **EMAIL:** brad.young@ekpc.coop

4. **DESCRIPTION OF CONSTRUCTION:** East Kentucky Power Cooperative (EKPC) is proposing the McCreary County Junction-Kentucky Utilities (KU) Wofford 69 kilovolt (kV) Transmission Line Rebuild Project, in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. Based on the floodplain data, 24 steel-pole structures would be installed, replacing 33 existing wood-pole structures within the designated floodplains of the project area; specifically, Cumberland River (20 new structures replacing 27 existing structures), Blake Fork (two new structures replacing two existing structures), Watts Creek (0 new structure replacing 1 existing structure), and Browns Creek (2 new structures replacing 3 existing structures,). Following construction of the new transmission line, the existing line section supported by 33 structures will be removed, which will result in the net loss of nine structures from the designated floodplains within the project area. The

diameter at ground level of the poles within the designated floodplains will be up to roughly 30 inches. It is also anticipated that the required number of guy wires and anchors will be consistent with the existing conditions.

5. **COUNTY:** McCreary and Whitley **NEAREST COMMUNITY:** Whitley City (E) and Williamsburg (W) KY

6. **USGS QUAD NAME:** Whitley City, Hollyhill, Cumberland Falls, and Wofford, KY

LATITUDE/LONGITUDE: 36.756462°N, -84.252123°W (Approx. center of proposed transmission line)

7. **STREAM NAME:** *Multiple*-Cumberland River, Blake Fork, Watts Creek, Browns Creek

WATERSHED SIZE (in acres): Undetermined-floodplains in project area associated with multiple stream/river crossings that drain large portions of east-central Kentucky

8. **LINEAR FEET OF STREAM IMPACTED:** The proposed transmission line rebuild project was designed to avoid placement of support structures in waters of the U.S.; therefore, no permanent loss of waters is anticipated for the proposed project. During construction activities, project access roads may require the crossing of streams/wetlands, resulting in temporary short-term impacts to these intermittent stream/wetland features. EKPC evaluated the anticipated access road impacts and has determined it can meet the conditions for coverage under the General WQC – Nationwide Permit #12. During construction, BMPs such as culverts, matting, silt fence, erosion blankets, etc. would be installed to minimize disturbances. Following construction, all temporary construction accesses would be removed in their entirety and returned to pre-construction elevations.

9. **DIRECTIONS TO SITE:** See attached Google Maps directions

10. **IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE?** ☐ Yes ☒ No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE: _____

11. **ESTIMATED BEGIN CONSTRUCTION DATE:** September 2020

12. **ESTIMATED END CONSTRUCTION DATE:** December 2022

13. **HAS A PERMIT BEEN RECEIVED FROM THE US ARMY, CORPS of ENGINEERS?** ☐ Yes ☒ No If yes, attach a copy of that permit.

14. **THE APPLICANT *MUST* ADDRESS PUBLIC NOTICE:**

(a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS:

_____ **Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit)**

_____ **Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)**

(b) _X_ I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:

It is anticipated that the project will have a beneficial impact on the floodplain due the placement of 24 new transmission line support structures in the designated floodplain and the removal of the 33 existing transmission line support structures resulting in the net loss of nine structures within the designated floodplains.

Contact Division of Water for requirements.

15. **I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:**

Stephen McKinney-Emergency Management Director, Floodplain Coordinator-*McCreary County*
Bryan Angel-Floodplain Administrator, Floodplain Coordinator-*Whitley County*

Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.

16. **LIST OF ATTACHMENTS:** topographic maps, Google directions

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. **I,** BAY **(owners Initials) CERTIFY THAT THE OWNER OWNS OR HAS OR WILL HAVE EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).**

18. **REMARKS:** *EKPC currently holds easements on properties containing the existing transmission line right-of-way

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: Bradley L. Young

Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: 9/10/19

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: McCreary County

Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: Whitley County

Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section, Division of Water, 300 Sower Boulevard, Frankfort, KY 40601

16. **LIST OF ATTACHMENTS:** topographic maps, Google directions

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. **I, _____ (owners Initials) CERTIFY THAT THE OWNER OWNS OR HAS OR WILL HAVE EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).**

18. **REMARKS:** *EKPC currently holds easements on properties containing the existing transmission line right-of-way

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: _____
Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: _____

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: McCreary County

_____
Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: 9/9/19

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: Whitley County

_____
Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section, Division of Water, 300 Sower Boulevard, Frankfort, KY 40601

16. **LIST OF ATTACHMENTS:** topographic maps, Google directions

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. **I, _____ (owners Initials) CERTIFY THAT THE OWNER OWNS OR HAS OR WILL HAVE EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).**

18. **REMARKS:** *EKPC currently holds easements on properties containing the existing transmission line right-of-way

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: _____
Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: _____

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: McCreary County

_____
Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: _____

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: Whitley County

Byron Angel
Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: 9-6-19

SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section, Division of Water, 300 Sower Boulevard, Frankfort, KY 40601

MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

ANTHONY R. HATTON
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

STREAM CONSTRUCTION PERMIT

For Construction In Or Along A Stream

Issued to: **East Kentucky Power Cooperative, Inc.**
Address: **4775 Lexington Road**
Winchester, KY 40392

Permit expires on **September 23, 2020**

Permit No. **29356P**

AI: **163467**

In accordance with KRS 151.250 and KRS 151.260, the Energy and Environment Cabinet approves the application dated **September 13, 2019** for **installation of 24 steel-pole new structures in conjunction with the installation of approximately 20.7 miles of transmission line across the floodplains of Cumberland River (20, replacing 27), Blake Fork (2, replacing 2), Browns Creek (2, replacing 2) and Watts Creek (0, replacing 1) located with starting coordinates 36.717381, -84.464619, and ending coordinates 36.772802, -84.129558, spanning McCreary and Whitley Counties.**

There shall be no deviation from the plans and specifications submitted and hereby approved unless the proposed change shall first have been submitted to and approved in writing by the Cabinet. This approval is subject to the attached limitations. **Please read these limitations carefully!** If you are unable to adhere to these limitations for any reason, please contact this office prior to construction.

This permit is valid from the standpoint of stream obstruction only. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies. Specifically if the project involves work in a stream, such as bank stabilization, dredging, relocation, or in designated wetlands, a 401 Water Quality Certification from the Division of Water will be required.

This permit is nontransferable and is not valid unless actual construction of this authorized work is begun prior to the expiration date noted above. Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990.

If you have any questions regarding this permit, please call Soheyl Bigdeli at 502-782-6890.

Issued September 23, 2019.

Ron Dutta, P.E., Supervisor
Floodplain Management Section
Water Resources Branch
Division of Water

RD/SB/rd

pc: London Regional Office
Bryan Angel – Whitley County Floodplain Coordinator
-McCreary County Floodplain Coordinator
File

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Stream Construction Permit

Wofford 69kV Transmission Line - Whitley Co

Facility Requirements

Permit Number: 29356P

Activity ID No.:APE20190001

STRC0000000001 (AI: 163467 - Transmission Line) for installation of 24 steel-pole new structures in conjunction with the installation of approximately 20.7 miles of transmission line across the floodplains of Cumberland River (20, replacing 27), Blake Fork (2, replacing 2), Browns Creek (2, replacing 2) and Watts Creek (0, replacing 1) located with starting coordinates 36.717381, -84.464619, and ending coordinates 36.772802, -84.129558, spanning McCreary and Whitley Counties.:

Submittal/Action Requirements:

Condition No.	Condition
S-1	East Kentucky Power Cooperative, Inc. must submit final construction report within 90 days after completion of construction. East Kentucky Power Cooperative, Inc. must notify in writing that the project has been completed in accordance with the approved plans and specifications. A Final Construction Report Form is enclosed. [401 KAR 4:060 Section 6]

Narrative Requirements:

Condition No.	Condition
T-1	The issuance of this permit by the cabinet does not convey any property rights of any kind or any exclusive privilege. [KRS 151.250 & 401 KAR 4:060]
T-2	This permit is issued from the standpoint of stream obstruction only and does not constitute certification of any other aspect of the proposed construction. The applicant is liable for any damage resulting from the construction, operation, or maintenance of this project. This permit has been issued under the provisions of KRS Chapter 151.250 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies. [KRS 151.250]
T-3	A copy of this permit must be available at the construction site. [KRS 151.250]
T-4	Any work performed by or for East Kentucky Power Cooperative, Inc. that does not fully conform to the submitted application or drawings and the limitations set forth in this permit, is subject to partial or total removal and enforcement actions pursuant to KRS 151.280 as directed by the Kentucky Department for Environmental Protection. [KRS 151.280]
T-5	Any design changes or amendments to the approved plans must be submitted to the Division of Water and approved in writing prior to implementation. [KRS 151.250]

Stream Construction Permit

Wofford 69kV Transmission Line - Whitley Co

Facility Requirements

Permit Number: 29356P

Activity ID No.:APE20190001

STRC0000000001 (AI: 163467 - Transmission Line) for installation of 24 steel-pole new structures in conjunction with the installation of approximately 20.7 miles of transmission line across the floodplains of Cumberland River (20, replacing 27), Blake Fork (2, replacing 2), Browns Creek (2, replacing 2) and Watts Creek (0, replacing 1) located with starting coordinates 36.717381, -84.464619, and ending coordinates 36.772802, -84.129558, spanning McCreary and Whitley Counties.:

Narrative Requirements:

Condition No.	Condition
T-6	Since McCreary and Whitley Counties participates in the National Flood Insurance Program, a local floodplain permit must be obtained prior to beginning of construction. Upon completion of construction East Kentucky Power Cooperative, Inc. must contact the local permitting agency for final approval of the construction for compliance with the requirements of the local floodplain ordinance. [401 KAR 4:060 Section 9(c)]
T-7	The permittee must obtain a Water Quality Certification (or a determination that none is required) through the Division of Water, Water Quality Branch before beginning construction. Contact the Water Quality Certification Supervisor at (502) 564-3410. [KRS 224.16-050 & Clean Water Act Section 401]
T-8	Erosion prevention measures, sediment control measures, and other site management practices shall be designed, installed, and maintained in an effective operating condition to prevent migration of sediment off site. [KRS 224.70-110]
T-9	To avoid secondary adverse impacts, all materials used shall be stable and inert, free from pollutants and floatable objects, and shall meet all appropriate engineering standards. (Inert here means materials that are not chemically reactive and that will not rot or decompose, such as soil, rock, broken concrete or similar materials.). [401 KAR 4:060 Section 7]
T-10	All debris and excess material shall be removed for disposal outside of the base floodplain. [401 KAR 4:060]
T-11	Upon completion of construction all disturbed areas shall be seeded and mulched or otherwise stabilized to prevent erosion. [401 KAR 4:060]
T-12	The entry of mobile equipment into the stream channel shall be limited as much as reasonably possible to minimize degradation of the waters of the Commonwealth. [401 KAR 4:060]
T-13	Construction other than as authorized by this permit shall require written approval from the Division of Water. [401 KAR 4:060]
T-14	The existing stream flow shall be maintained at all times during construction using standard flow diversion or pump around methods. Cofferdams or other structures placed in the stream shall be removed immediately if adverse flooding conditions result or if a flooding event is imminent. [401 KAR 4:060 Section 4]

FINAL CONSTRUCTION REPORT

NAME: East Kentucky Power Cooperative Inc

PERMIT NO: 29356P

AI NO: 163467, Activity ID: APE20190001

Has all work on this project been completed according to the plans and specifications on file with the Division of Water?

Yes: _____

No: _____ If no, explain. You may include attachments if necessary.

_____

_____

_____

_____

_____

_____

Mailing Instructions

- Fold the top edge of this page to the top edge of this box.
- Fold the bottom edge of the page up to meet the top fold and tape shut.
- Fill out return address portion
- Affix a stamp and mail.

Place
Stamp
Here

Floodplain Management Section
Division of Water
300 Sower Boulevard
Frankfort, KY 40601

From:	Hokanson, Shawn M (EEC)
To:	Wesley Byrd
Cc:	VanPelt, Alex (EEC); Josh Young
Subject:	RE: East Kentucky Power Stream Construction Permit 2935P
Date:	Monday, July 13, 2020 2:30:40 PM
Attachments:	image001.png

This email severs as your confirmation that permit 29356 is terminated effective 7/13/20. Per your email, the project qualifies for coverage under the new KY FPGP and construction must be completed according to the requirements of that permit.

Shawn Hokanson
502-782-6977

From: Wesley Byrd [mailto:Wesley.Byrd@ekpc.coop]
Sent: Monday, July 13, 2020 2:15 PM
To: Hokanson, Shawn M (EEC) <Shawn.Hokanson@ky.gov>
Cc: VanPelt, Alex (EEC) <Alex.VanPelt@ky.gov>; Josh Young <josh.young@ekpc.coop>
Subject: East Kentucky Power Stream Construction Permit 2935P

Good afternoon Mr. Hokanson,

East Kentucky Power Cooperative would like to terminate the Wofford 69kV Transmission Line-Whitley Co Stream Construction Permit 2935P under AI 163467. EPKC stream construction activity for this project is eligible for coverage under the Floodplain General Permit. Please let me know if any further information is needed. Thank you for your help.

Wesley Byrd
East Kentucky Power Cooperative, Inc.
Environmental Scientist Natural Resource Inspector
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9201
Cell: (859) 300-2243
wesley.byrd@ekpc.coop

Chris Carpenter

From: stephen@mccrearycounty.com
Sent: Friday, December 13, 2019 8:36 AM
To: Chris Carpenter
Subject: RE: McCreary County Junction-KU Wofford

Good Morning Sir,

There will be no local permits thru my office needed for you to go forward with your project. Good luck with your project and let me know if you need anything else

Stephen McKinney,
McCreary County Emergency Management Director
1 North Main St
Whitley City, KY 42653
Cell: 606-516-4977

From: Chris Carpenter <Chris.Carpenter@ekpc.coop>
Sent: Friday, December 13, 2019 8:34 AM
To: 'stephen@mccrearycounty.com' <stephen@mccrearycounty.com>
Cc: Josh Young <josh.young@ekpc.coop>
Subject: McCreary County Junction-KU Wofford

Good morning Mr. McKinney,

We recently received our Stream Construction Permit for the above-referenced project. As you may recall, you signed off on our permit application on September 9, 2019 (see attached). One of the conditions of the permit (T-6) is that we get final approval from you for the construction – specifically, obtain any local permits that may be required prior to construction kick-off. Therefore, we would like to confirm with you in writing (email will suffice) whether any local permits are indeed required by your office prior to moving forward.

Please let me know if you have any questions and have a great day.

Thanks,

Chris Carpenter

Josh Young

From: Taylor, Jacob (EEC) <jacob.taylor@ky.gov>
Sent: Tuesday, February 4, 2020 1:12 PM
To: Chris Carpenter; Josh Young
Cc: Ronnie Terrill
Subject: RE: Request for additional information
Attachments: NWP 12 2017.pdf

Based on the information provided the Water Quality Certification Section has determined that this project is covered under the KY General Certification of the Nationwide Permit #12 for Utility Line Backfill and Bedding provided that this project has received the appropriate Nationwide Permit from the U.S. Army Corps of Engineers and all conditions of the enclosed General Water Quality Certification are met. Please carefully review the enclosed General Water Quality Certification conditions. Please contact our office if the scope of the project or plans change, as this may change the type of certification that is required.

Thank You,

Jacob Taylor
Water Quality Certification
Division of Water
Kentucky Dept. for Environmental Protection
502-782-0138
401 Water Quality Certification Webpage

From: Chris Carpenter [mailto:Chris.Carpenter@ekpc.coop]
Sent: Monday, February 3, 2020 10:16 AM
To: Josh Young ; Taylor, Jacob (EEC)
Cc: Ronnie Terrill
Subject: RE: Request for additional information

Mr. Taylor,

Just following up on the information below. We were wondering if you needed any additional information for the McCreary County-KU Wofford 69 kV Transmission Line Rebuild Project. Please let us know if you have any questions and have a great week.

Thanks,

Chris

From: Josh Young <josh.young@ekpc.coop>
Sent: Friday, November 1, 2019 3:16 PM
To: 'Taylor, Jacob (EEC)' <jacob.taylor@ky.gov>
Cc: Chris Carpenter <Chris.Carpenter@ekpc.coop>; Ronnie Terrill <ronnie.terrill@ekpc.coop>
Subject: RE: Request for additional information

Mr. Taylor,

Please see attached and below in regards to your request for additional information for East Kentucky Power Cooperative's (EKPC) proposed McCreary County Junction- KU Wofford 69 kV Transmission Line Rebuild Project in portions of McCreary and Whitley Counties. The proposed project would consist of removing the existing aerial transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. Based on the engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet. Within the existing ROW, the vegetation is maintained by EKPC and local agricultural practices as low growing herbaceous plant communities and no tree clearing will be required. However, following construction activities, EKPC will identify and clear any "danger trees" located along the edges of the transmission line ROW easement that have the potential to threaten the future operation of the facility. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing U.S. Forest Service roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads.

The proposed transmission line rebuild project and primary construction access roads were designed to avoid waters of the Commonwealth; therefore, no permanent loss of waters is anticipated for the proposed project. During construction activities, vegetation clearing activities may require the crossing of streams and adjacent wetlands within the existing ROW, resulting in temporary short-term impacts to these intermittent features. Due to the location of the project, many of the streams and their tributaries are within known habitat for several aquatic threatened or endangered species, and none of these streams or tributaries will be crossed or impacted. In addition, there are several large perennial streams that will not be impacted due to size, depth, bank height, etc. After consulting with our engineering department, we have identified up to 12 potential stream crossings that may occur during the tree clearing portions of the proposed project construction, see attached maps. EKPC is committed to a maximum impact of 15 linear feet per stream crossing for a total of 180 cumulative feet of temporary stream impact. EKPC evaluated these anticipated access road impacts and has determined it meets the conditions for coverage under the General WQC – Nationwide Permit #12. Per the nationwide permit, during construction erosion prevention and sedimentation control BMPs such as silt fence, erosion blankets, etc. would be designed, installed, and maintained in effective operating conditions at all times so that violations of state water quality standards do not occur. Appropriate measures such as culverts, matting, etc. would be installed to maintain normal downstream flows and materials would be placed in a manner so as not to be eroded by expected high flows. Following construction, all temporary construction accesses would be removed in their entirety and returned to pre-construction elevations, and revegetated.

Please let us know if you there are questions or additional information required.

Thank you,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

the Reason I Go Home Tonight

EKPC SAFETY IS RIGHT

From: Taylor, Jacob (EEC)
Sent: Friday, October 4, 2019 2:55 PM
To: Brad Young
Cc: Josh Young ; Ronnie Terrill
Subject: Request for additional information

RE: §401 Water Quality Certification Application
Request for additional information
Ronnie Terrill, East Kentucky Power Cooperative, Inc.
AI No. 163467
Whitley Co. KY

Mr. Young,

The Kentucky Division of Water, Water Quality Certification (WQC) Section has reviewed East Kentucky Power Cooperative, Inc's Application for Permit to Construct Across or Along a Stream and/or Water Quality Certification received 9/13/2019. Additional information is required to process your application. Please provide the information requested below:

1) A list of all proposed stream and/or wetland utility crossings.
    a. For each stream and wetland crossing, list the
        i. crossing method (e.g., directional bore or open trench).
        ii. linear feet of stream impacts or the acreage of wetland impacts*

2) A list of any stream and/or wetland proposed to be impacted from associated activities (staging areas, maintenance roads, bank stabilization, outfalls, headwalls, etc.)
    a. For each stream and/or wetland impact, list the linear feet of stream impacts or the acreage of wetland impacts*

*"Impacts" refers to temporary or permanent fill material placed below the stream Ordinary High Water Mark (OHWM) and/or fill material placed within a wetland. For utility line crossing and roads, only one bank length is used in calculation of the impact totals.

Please provide the requested information by 11/4/2019. After review of your submittal, the WQC Section may request additional information. Please contact me if you have any questions.

Jacob Taylor

Water Quality Certification
Division of Water
Kentucky Dept. for Environmental Protection
502-782-0138
401 Water Quality Certification Webpage

MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

R. BRUCE SCOTT
COMMISSIONER

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601

General Certification--Nationwide Permit # 12
Utility Line Backfill and Bedding

This General Certification is issued March 19, 2017, in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this and all nationwide permits, the definition of surface water is as per 401 KAR 10:001 Chapter 10, Section 1(80): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the commonwealth.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

For all other operations, the Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 304, 306 and 307 of the CWA, will not be violated for the activity covered under NATIONWIDE PERMIT 12, namely Utility Line Backfill and Bedding, provided that the following conditions are met:

1. The activity will not occur within surface waters of the Commonwealth identified by the Kentucky Division of Water as Outstanding State or National Resource Water, Cold Water Aquatic Habitat, or Exceptional Waters.

2. The activity will not occur within surface waters of the Commonwealth identified as perpetually-protected (e.g. deed restriction, conservation easement) mitigation sites.

3. This general water quality certification is limited to the crossing of surface waters by utility lines. This document does not authorize the installation of utility lines in a linear manner within the stream channel or below the top of the stream bank.

4. For a single crossing, impacts from the construction and maintenance corridor in surface waters shall not exceed 50 feet of bank disturbance.

5. This general certification shall not apply to projects where multiple nationwide permits are issued for individual crossings which are part of a single, larger utility line project where the cumulative impacts exceed ½ acre of wetlands or 300 linear feet of surface waters. Cumulative impacts include utility line crossings, permanent or temporary access roads, headwalls, associated bank stabilization areas, substations, pole or tower foundations, maintenance corridor, and staging areas.

6. Stream impacts under Conditions 4 and 5 of this certification are defined as the length of bank disturbed. For utility line crossings and roads, only one bank length is used in calculation of the totals.

7. Any crossings must be constructed in a manner that does not impede natural water flow.

8. Stream impacts covered under this General Water Quality Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KWQP).

9. The Kentucky Division of Water may require submission of a formal application for an individual certification for any project if the project has been determined to likely have a significant adverse effect upon water quality or degrade the waters of the Commonwealth so that existing uses of the water body or downstream waters are precluded.

10. Activities that do not meet the conditions of this General Water Quality Certification require an Individual Section 401 Water Quality Certification.

11. Blasting of stream channels, even under dry conditions, is not allowed under this general water quality certification.

12. Utility lines placed parallel to the stream shall be located at least 50 feet from an intermittent or perennial stream, measured from the top of the stream bank. The cabinet may allow construction within the 50 foot buffer if avoidance and minimization efforts are shown and adequate methods are utilized to prevent soil from entering the stream.

13. Utility line stream crossings shall be constructed by methods that maintain flow and allow for a dry excavation. Water pumped from the excavation shall be contained and allowed to settle prior to re-entering the stream. Excavation equipment and vehicles shall operate outside of the flowing portion of the stream. Spoil material from the excavation shall not be allowed to enter the flowing portion of the stream.

14. The activities shall not result in any permanent changes in pre-construction elevation contours in surface waters or wetlands or stream dimension, pattern or profile.

15. Utility line activities which impact wetlands shall not result in conversion of the area to non-wetland status. Mechanized land clearing of forested wetlands for the installation or maintenance of utility lines is not authorized under this certification.

16. Activities qualifying for coverage under this General Water Quality Certification are subject to the following conditions:

- Projects requiring in-stream stormwater detention/retention basins shall require individual water quality certifications.
- Erosion and sedimentation pollution control plans and Best Management Practices must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur.
- Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters of the Commonwealth, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities.
- Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering the watercourse.
- Removal of riparian vegetation shall be limited to that necessary for equipment access.
- To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions.
- Heavy equipment, e.g. bulldozers, backhoes, draglines, etc., if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall

be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation.

- Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement.
- If there are water supply intakes located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done.
- Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling (800) 928-2380.

Non-compliance with the conditions of this general certification or violation of Kentucky state water quality standards may result in civil penalties.

Josh Young

From: Josh Young
Sent: Monday, August 26, 2019 11:42 AM
To: 'McIntosh, Mark M CIV USARMY CELRN (USA)'
Subject: RE: Vertical Clearance- Near Williamsburg, KY (UNCLASSIFIED)

Mr. McIntosh,

Thank you for the quick response and information. Yes, the proposed 69-kV line and pole replacement project would be in the same alignment, with no work occurring in the WOUS, and no additional lines, with a vertical clearance of 59-feet. Based on this, it is our understanding the project would be covered under Maintenance, and no permit verification is required from your office.

Thank you,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

-----Original Message-----
From: McIntosh, Mark M CIV USARMY CELRN (USA) <Mark.M.Mcintosh@usace.army.mil>
Sent: Monday, August 26, 2019 10:24 AM
To: Josh Young <josh.young@ekpc.coop>
Subject: Vertical Clearance- Near Williamsburg, KY (UNCLASSIFIED)

CLASSIFICATION: UNCLASSIFIED

Mr. Young:

Thanks for contacting us about your 69-kV line and pole replacement on the Cumberland River, 0.4 miles downstream of the KY 204 bridge in Whitley County, Kentucky. If the project is a straight replacement, in the same alignment, with no work occurring in WOUS, and no additional lines being hung, it appears that the work would be covered under Maintenance, therefore no permit verification is required from this office. The minimum vertical clearance for a 69kV line at your location is 20.0 feet.

If you have any questions, please give me a call and we can discuss further.

Have a good day,

Mark M McIntosh
Regulatory Specialist
East Regulatory Field Office
Regulatory Division
Nashville District

(865) 986-7296

Internet: http://www.lrn.usace.army.mil
Facebook: http://www.facebook.com/nashvillecorps

The Nashville District is committed to providing the highest level of support to the public. To help us ensure we continue to do so, please complete the Customer Satisfaction Survey located at our website at http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:8126372295348

CLASSIFICATION: UNCLASSIFIED

Chris Carpenter

From: Josh Young
Sent: Monday, May 13, 2019 4:40 PM
To: Ryall, Jennifer (Heritage Council); Gunn, Chris (Heritage Council)
Cc: Chris Carpenter
Subject: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, McCreary and Whitley Counties
Attachments: McCrearyCoJct-KUWofford_Cultural Resourse APE Maps.pdf

Good afternoon Jenn and Chris,

We are starting our environmental review of East Kentucky Power Cooperative's (EKPC) proposed McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. As a part of that process, we would like to coordinate development of cultural historic and archaeological areas of potential effect (APEs). Attached are topographic maps depicting the location of the proposed project and APEs. In addition to our typical USDA Rural Utilities Service financial assistance, this project will also require amendment of US Forest Service Special Use Permit. We have been coordinating project activities with Melissa Ramsey at the Steans Ranger District, Daniel Boone National Forest. We anticipate their APE requirements, especially for the roads, may be more inclusive than those proposed below and will plan to conduct surveys per DBNF requirements on federal lands.

Project Description

The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres.

Based on the preliminary engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. Roughly 16.6-miles of access roads would be improved or constructed for the construction and maintenance of the transmission line, which would be approximately 15 feet in width. These access roads would cross approximately 5.6-miles of private land, involving approximately 11.7-acres, and approximately 11.0-miles of NFS land, involving approximately 20.0 acres.

EKPC is proposing the McCreary County Jct. – KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (3/0 ASCR) with a larger size conductor (795 ACSR-TW) currently utilized by EKPC. EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor. Therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

EKPC makes the following recommendations regarding cultural resource APEs for the project:

Archaeological APE

For archaeological resources, EKPC is proposing to conduct a Phase I archaeological investigation within the existing 20.7-mile-long, 100-foot-wide transmission line right-of-way. EKPC is also proposing to investigate 50-foot wide corridors within which the proposed 16.6 miles of approximately 15-ft wide access roads would be located, outside of the 100-foot wide line survey area. This APE would include all areas where disturbances associated with construction of the project are anticipated and represents a total of approximately 352 acres. EKPC believes this APE is appropriate to evaluate the potential effect on archaeological resources from the proposed project. Deep testing will be conducted within any alluvial soils encountered within the project area per KHC Specifications for Fieldwork.

Cultural Historic APE

The proposed transmission line rebuild project would require removal of the existing facility and construction of a new facility within the same ROW easement. Although the new steel pole structures are anticipated to be approximately 12 feet taller than the existing wood pole structures, the average span between structures would be increased and 49 fewer structures would be required. Therefore. EKPC is recommending an Overview Study of the cultural historic resources within 750 feet (1500 feet corridor) of the transmission centerline be conducted. Any cultural historic resources located immediately adjacent to project access roads outside of the 1500 foot corridor would also be assessed following the same overview methods. EKPC's contractor, Cultural Resource Analysts, Inc. (CRA), would document and assess the effects of the proposed project on historic properties within the APE. Properties that are listed, formerly determined eligible for listing, or appear potentially eligible for listing in the National Register will be documented to KHC survey standards, including a full description and National Register evaluation of each property and completion of a KHC survey form. Properties containing resources 50 years of age or older that appear ineligible for listing in the National Register will be mapped, photographed, and summarized in a table including a brief description of the property and its current condition as they relate to the potential eligibility of the resource; resources recommended ineligible will not be formally surveyed. EKPC believes an Overview Study of the proposed APE, as described above, is appropriate to evaluate the potential effect on cultural historic resources from the proposed project.

We would like your feedback on these APE recommendations as soon as possible and will coordinate field work with CRA accordingly. As always, please contact me should you have any questions or need additional information.

Thank you,

Josh Young
East Kentucky Power Cooperative, Inc.
Natural Resources and Environmental Communications
4775 Lexington Road
Winchester, KY 40391
Office: (859) 745-9799
Cell: (859) 749-0553
josh.young@ekpc.coop

Chris Carpenter

From: Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Sent: Thursday, May 16, 2019 10:44 AM
To: Josh Young; Ryall, Jennifer (Heritage Council)
Cc: Chris Carpenter
Subject: RE: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, McCreary and Whitley Counties

Hello Josh,

Thank you for the email concerning the APE for the proposed project. I think that the APE and survey proposed for the project are appropriate. I look forward to seeing the results.

This project will definitely require an ARPA permit from DBNF. Please let us know if the three of us – EKPC, DBNF, SHPO – need to coordinate on the review of the project. Will EKPC act as lead federal agency for all of the project?

Thank you,
Chris Gunn

Christopher M. Gunn, Ph.D.
Archaeology Review Coordinator
Kentucky Heritage Council

410 High Street
Frankfort, KY 40601

Phone: 502-892-3615

From: Josh Young <josh.young@ekpc.coop>
Sent: Monday, May 13, 2019 4:40 PM
To: Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>; Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Cc: Chris Carpenter <Chris.Carpenter@ekpc.coop>
Subject: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, McCreary and Whitley Counties

Good afternoon Jenn and Chris,

We are starting our environmental review of East Kentucky Power Cooperative's (EKPC) proposed McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. As a part of that process, we would like to coordinate development of cultural historic and archaeological areas of potential effect (APEs). Attached are topographic maps depicting the location of the proposed project and APEs. In addition to our typical USDA Rural Utilities Service financial assistance, this project will also require amendment of US Forest Service Special Use Permit. We have been coordinating project activities with Melissa Ramsey at the Steans Ranger District, Daniel Boone

Chris Carpenter

From: Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>
Sent: Friday, May 17, 2019 9:41 AM
To: Josh Young; Gunn, Chris (Heritage Council)
Cc: Chris Carpenter
Subject: RE: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, McCreary and Whitley Counties

Josh and Chris,

Our office concurs that the Cultural Historic APE presented below for the EKPC McCreary County Junction – KU Wofford 69kV Transmission Line section in McCreary/Whitley Counties appears to be appropriate. The overview report format also appears to be appropriate for this type of transmission line rebuild project. I'll echo Chris' questions regarding the DBNF/USFS involvement in this project as it relates to who the lead agency will be and how Section 106 coordination happens.

Thanks,
~Jenn

Jennifer Ryall
Environmental Review Coordinator
Kentucky Heritage Council
410 High Street
Frankfort, Kentucky 40601
Phone: (502) 892-3619

From: Josh Young <josh.young@ekpc.coop>
Sent: Monday, May 13, 2019 4:40 PM
To: Ryall, Jennifer (Heritage Council) <Jennifer.Ryall@ky.gov>; Gunn, Chris (Heritage Council) <Chris.Gunn@ky.gov>
Cc: Chris Carpenter <Chris.Carpenter@ekpc.coop>
Subject: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project, McCreary and Whitley Counties

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Good afternoon Jenn and Chris,

We are starting our environmental review of East Kentucky Power Cooperative's (EKPC) proposed McCreary County Junction – Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. As a part of that process, we would like to coordinate development of cultural historic and archaeological areas of potential effect (APEs). Attached are topographic maps depicting the location of the proposed project and APEs. In addition to our typical USDA Rural Utilities Service financial assistance, this project will also require amendment of US Forest Service Special Use Permit. We have been coordinating project activities with Melissa Ramsey at the Steans Ranger District, Daniel Boone National Forest. We anticipate their APE requirements, especially for the roads, may be more inclusive than those proposed below and will plan to conduct surveys per DBNF requirements on federal lands.

Project Description

ANDY BESHEAR
GOVERNOR

MIKE BERRY
SECRETARY

TOURISM, ARTS AND HERITAGE CABINET
KENTUCKY HERITAGE COUNCIL
THE STATE HISTORIC PRESERVATION OFFICE
410 HIGH STREET
FRANKFORT, KENTUCKY 40601
PHONE (502) 564-7005
FAX (502) 564-5820
www.heritage.ky.gov

CRAIG A. POTTS
EXECUTIVE DIRECTOR
& STATE HISTORIC
PRESERVATION OFFICER

March 31, 2020

Timothy Reed, District Ranger
United States Department of Agriculture
Daniel Boone National Forest
Stearns Ranger District
3320 Highway 27 North
Whitley City, KY 42653

Re: **ABOVEGROUND ONLY:** ***Cultural Historic Overview Survey for the Proposed McCreary County Junction – Kentucky Utilities Wofford 69kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky,*** prepared by Tim Condo, report dated October 3, 2019 (transmittal letter dated March 2, 2020)

Dear District Ranger Reed:

Thank you for your transmittal letter including the consultant's recommendation for this USFS undertaking which includes EKPC as a cooperating federal agency. We understand that the proposed project involves rebuilding an existing transmission line section located in portions of McCreary and Whitley Counties and extending for 20.7 miles (oriented east-west, roughly paralleling KY-478). We understand that 151 steel pole structures with an approximate aboveground height of 72 feet and a typical span length of 750 feet would be used to construct the new line, replacing the existing 200 wooden pole structures with an approximate above ground height of 60 feet and a typical span length of 550 feet. Our office coordinated on the APE, defined as a 1,500-foot corridor consisting of a 750-foot buffer around the centerline of the proposed transmission line, in advance.

Based on our review, we understand that the author of the report identified a total of 81 cultural historic sites, none of which had been previously surveyed. We understand that, based on a lack of integrity and significance, the author recommended that Sites 1-5, 7-39, 41-63, and 65-81 are Not Eligible for listing on the National Register of Historic Places (NRHP). We understand that the author of the report recommended that, for Sites 6, 40, and 64 more information would be required to understand their integrity and significance as these sites were not able to be evaluated. The consultant recommends that the NRHP eligibility of Sites 6, 40, and 64 should reflect an Undetermined status at this time. Based on our review, our office concurs with the recommendation that Sites 1-5, 7-21, 23-26, 28-34, 36-39, 41-63 do not appear to retain sufficient integrity or significance and appear to be Not Eligible for listing on the NRHP. We understand that Sites 6, 40, and 64 were not able to be accessed. As it is just outside the APE for this project and should not be either directly or indirectly effected by the proposed undertaking, our office withholds comment on the NRHP eligibility of Site 64 at this time and thus also concurs with the Undetermined NRHP eligibility recommendation for Site 64. For Sites 6 and 40, we understand that they are within the APE for this project and are requesting additional information as described below.
(Continued on Next Page)

Section 106 Review
Re: **ABOVEGROUND ONLY:** ***Cultural Historic Overview Survey for the Proposed McCreary County Junction – Kentucky Utilities Wofford 69kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky***, prepared by Tim Condo, report dated October 3, 2019

March 31, 2020

Our office feels that additional information would be necessary to understand the historic integrity and significance of Sites 22, 35, and 65. Our office disagrees with the recommendation that Site 27, the log Piney Grove Methodist Church (and its associated Cemetery), is Not Eligible and instead recommends that, despite its integrity issues, Site 27 appears to be Eligible for listing under Criterion C as an example of an early log church of which few have been preserved in Kentucky and, with further research, likely under Criterion A for its contributions to the development of religious institutions in Whitley County. It appears that Sites 22 and 35 may have a common local builder; although there are some differences, these two houses appear to share a rather unique Craftsman house type and both these houses appear to preserve design features such as clipped gables, exposed rather tails, and Craftsman style front porches. Our office feels that additional information would be needed for us to understand whether any of the families buried in the Cemetery at Site 65 have significance under Criteria Consideration D/Criterion A or B. Please also note that our office does not assume that continued modern burials automatically create a negative impact to a cemetery as these burials continue to promote the original cemetery function. To help us understand whether our office needs this additional information above at this time, please explain in detail the construction elements and anticipated effects at the locations of Sites 22, 27, 35, and 65 as well as at Sites 6 and 40. This would include detailing the revised locations of new steel poles and their proximity to these six resources, with tree lines topography taken into account. **Please note that this response is for the aboveground portion of the project only and that the archaeology response will happen separately when that report is available for our comment.** Should you have any questions, feel free to contact Jennifer Ryall of my staff at 502-892-3619.

Sincerely,

Craig A. Potts,
Executive Director and State Historic Preservation Officer

CP:jr, KHC #57123
Cc: Wayna Adams, Heritage Program Manager; Josh Young, East Kentucky Power Cooperative

cra
cultural resource analysts, inc.

April 8, 2020

Craig A. Potts
Executive Director and State Historic Preservation Officer
Kentucky Heritage Council
410 High Street
Frankfort, KY 40601

RE: Kentucky Heritage Council (KHC) review of *Cultural Historic Overview Survey for the Proposed McCreary County Junction – Kentucky Utilities Wofford 69kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky*, prepared by Tim Condo, report dated October 3, 2019 (transmittal letter dated March 2, 2020)

Dear Mr. Potts:

Cultural Resource Analysts, Inc. (CRA), is in receipt of a copy of your letter dated March 31, 2020 to Timothy Reed, District Ranger, United Stated Department of Agriculture, Daniel Boone National Forest, regarding your office's review of the referenced proposed project and associated cultural historic report. The proposed project involves rebuilding an existing transmission line section located in portions of McCreary and Whitley Counties and extending for 20.7 mi (oriented east-west, roughly paralleling KY 478). The transmission line section will consist of 151 steel pole structures with an approximate aboveground height of 72 ft and a typical span length of 750 ft would be used to construct the new line, replacing the existing 200 wooden pole structures with an approximate above ground height of 60 ft and a typical span length of 550 ft. The KHC coordinated on the APE, defined as a 1,500-ft corridor consisting of a 750-ft buffer around the centerline of the proposed transmission line.

In the referenced report, the author identified a total of 81 cultural historic sites, none of which were previously surveyed. The KHC concurred with the recommendation contained in the report that Sites 1–5, 7–21, 23–26, 28–34, 36–39, 41–63, and 66–81 do not appear to retain sufficient integrity or significance and appear to be Not Eligible for listing in the National Register of Historic Places (NRHP). Your office also acknowledged that, as stated in the referenced report, Sites 6, 40, and 64 reflected an Undetermined status because they were not able to be accessed during the survey. The KHC withheld comment on the NRHP eligibility of Site 64 and also concurred with the Undetermined NRHP eligibility recommendation for Site 64 because it is just outside the APE for the proposed project and should not be either directly or indirectly affected by the proposed undertaking. The KHC has requested additional information as to the construction elements of the proposed project in the vicinity of Sites 6, 22, 27, 35, 40, and 65. The KHC also disagreed with the recommendation that Site 27, the Piney Grove Methodist Church (and its associated cemetery), is Not Eligible and instead recommended that, despite its integrity issues, Site 27 appears to be Eligible for listing under Criterion C as an example of an early log church of which few have been preserved in Kentucky and, with further research, likely eligible under Criterion A for its contributions to the development of religious institutions in Whitley County.

To assist KHC in understanding the construction elements of the proposed project in the vicinity of Sites 6, 22, 27, 35, 40, and 65, CRA has provided the following information for each site in question. Site 6, a residence, is oriented north-northwest, away from the proposed transmission line. Site 6 is located approximately 485 ft north-northwest of the nearest proposed steel pole structure, and a substantial vegetative buffer consisting of mature trees and heavy wooded vegetation screens the site from the proposed rebuilding of the existing transmission line. Considering the distance between Site 6 and the nearest proposed steel pole structure, the associated dwelling's orientation, the vegetative

buffer, and the presence of the existing transmission line and wood pole structure, the proposed project will not result in adverse effects to Site 6. Even if portions of the proposed project are visible from Site 6, it will not constitute a major visual intrusion within the property's setting and will not diminish any characteristics that could potentially make this Undetermined site eligible for listing in the NRHP.

Site 22, a residence, is oriented east-northeast in the direction of the existing transmission line that is proposed to be rebuilt; however, the dwelling is not oriented toward any proposed steel pole structure. Site 22 is located approximately 135 ft south of the nearest proposed steel pole structure which replaces an existing wood double pole structure in approximately the same location. Considering the distance between Site 22 and the nearest proposed steel pole structure, as well as the presence of the existing transmission line and wood pole structure, the proposed project will not result in adverse effects to Site 22. Even if portions of the proposed project are visible from Site 22, it will not constitute a major visual intrusion within the property's setting and will not diminish the associated dwelling's architectural characteristics, including its clipped gables, exposed rafter tails, and Craftsman-style front porch, for which the site may be eligible, as suggested by the KHC in the referenced letter dated March 31, 2020.

Site 27, the Piney Grove Methodist Church and associated Cemetery, is oriented northwest, away from the proposed rebuilt transmission line. The church is located approximately 245 ft north of the nearest proposed steel pole structure, which appears to be screened by a row of mature trees. The nearest steel pole structure to the portion of the cemetery southwest of the church is approximately 135 ft away and is also shielded by vegetation from the cemetery. The nearest proposed steel pole structure that would be visible from the church is approximately 305 ft southwest of the church and about 180 ft southwest of the cemetery. Taking into consideration the orientation of Site 27, its distance from the proposed steel pole structures in its vicinity, the vegetative buffer, and the presence of the existing transmission line and wood pole structures, the proposed project will not result in adverse effects to Site 27. Even if portions of the proposed project are visible from Site 27, it will not constitute a major visual intrusion within the property's setting and will not diminish the associated church's log construction or the church's and the associated cemetery's potential historic associations for which the site may be eligible, as suggested by the KHC in the referenced letter dated March 31, 2020.

Site 35, a residence, is oriented south-southeast, toward the proposed project but away from the nearest proposed steel pole structure, which is located approximately 510 ft east-southeast of the dwelling. A stand of mature trees screens a substantial portion of the proposed project that would be in the vicinity of Site 35, including the next nearest proposed steel pole structure, which is approximately 550 ft south of the residence. Considering the distance between Site 35 and the nearest proposed steel pole structures in its vicinity, the existing vegetative buffer, and the existing transmission line and wood pole structures, the proposed project will not result in adverse effects to Site 35. Even if portions of the proposed project are visible from Site 35, it will not constitute a major visual intrusion within the property's setting and will not diminish the associated dwelling's architectural characteristics, including its clipped gables and Craftsman-style front porch, for which the site may be eligible, as suggested by the KHC in the referenced letter dated March 31, 2020.

Site 40, a residence, is oriented southwest away from the proposed transmission line. The nearest proposed steel pole structure is located approximately 435 ft southeast of the house associated with Site 40. A row of mature trees screens the site from the proposed project. Given the dwelling's orientation, its distance from the nearest proposed steel pole structure, the vegetative buffer, and the presence of the existing transmission line and wood pole structures, the proposed project will not

cra
cultural resource analysts, inc.

result in adverse effects to Site 40. Even if portions of the proposed project are visible from Site 40, it will not constitute a major visual intrusion within the property's setting and will not diminish any characteristics that could potentially make this Undetermined site eligible for listing in the NRHP.

Site 65, a cemetery, is located approximately 150 ft southwest of the nearest proposed steel pole structure; however, the site is set among a stand of mature trees and is therefore screened entirely from the proposed project and nearest proposed steel pole structure. Considering the substantial vegetative screening around the site, the proposed project will not result in adverse effects to Site 65. Even if portions of the proposed project are visible from Site 65, it will not constitute a major visual intrusion within the property's setting and will not diminish the associated cemetery's potential historic associations for which the site may be eligible, as suggested by the KHC in the referenced letter dated March 31, 2020.

In summary, CRA recommends that for the aforementioned reasons, the proposed project will not result in adverse effects to Sites 6, 22, 27, 35, 40, and 65. If you have any questions, please do not hesitate to contact me at your convenience.

Sincerely,

Corporate Headquarters
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office 859.252.4737
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Trent Spurlock, MHP
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CRAIG A. POTTS
EXECUTIVE DIRECTOR
& STATE HISTORIC
PRESERVATION OFFICER

April 16, 2020

Timothy Reed, District Ranger
United States Department of Agriculture
Daniel Boone National Forest
Stearns Ranger District
3320 Highway 27 North
Whitley City, KY 42653

Re: Addnl Info: ABOVEGROUND ONLY: ***Cultural Historic Overview Survey for the Proposed McCreary County Junction – Kentucky Utilities Wofford 69kV Transmission Line Rebuild Project in Whitley and McCreary Counties, Kentucky***

Thank you for the additional information provided via e-mail by CRA on April 8, 2020, in response to our request for additional information regarding Sites 22, 27, 35, and 65 as well as at Sites 6 and 40 (the latter which could not be accessed). We understood from your original letter that this is a USFS undertaking including EKPC as a cooperating federal agency. Our office concurred with the author of the above report on March 31, 2020, that "Sites 1-5, 7-21, 23-26, 28-34, 36-39, 41-63 do not appear to retain sufficient integrity or significance and appear to be Not Eligible for listing on the National Register of Historic Places (NRHP). We understand that Sites 6, 40, and 64 were not able to be accessed. As it is just outside the APE for this project and should not be either directly or indirectly effected by the proposed undertaking, our office withholds comment on the NRHP eligibility of Site 64 at this time and thus also concurs with the Undetermined NRHP eligibility recommendation for Site 64." Our office also recommended that Site 27, the log Piney Grove Methodist Church (and its associated Cemetery), appears to be Eligible for listing under Criterion C as an example of an early log church of which few have been preserved in Kentucky and, with further research, likely under Criterion A for its contributions to the development of religious institutions in Whitley County.

Based on our review of the additional information provided, our office understands that either due to existing vegetative buffer of the proposed new line (trees) or through existing transmission line in those locations already having impacted the viewshed (and no new direct effects anticipated), Sites 6, 22, 27, 35, 40, or 65 should experience no direct or indirect effects from this undertaking. As a result, our office is able to withhold comment on the NRHP eligibility of Sites 6, 22, 35, 40, and 65 as their historic integrity will not be impacted by the proposed project. We are not requesting additional information on Sites 6, 22, 35, 40, or 65 at this time and will leave their NRHP eligibility status as "Undetermined" at this time. Our office is now able to concur with USFS's official determination of No Adverse Effect **for the aboveground portion of the undertaking only**. Please note that the archaeology comments will be included in separate response letters.

Sincerely,

Craig A. Potts,
Executive Director and State Historic Preservation Officer

CP:jr, KHC #57485
Cc: Wayna Adams, Heritage Program Manager; Josh Young, East Kentucky Power Cooperative

ANDY BEASHEAR
GOVERNOR

MIKE BERRY
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CRAIG A. POTTS
EXECUTIVE DIRECTOR
& STATE HISTORIC
PRESERVATION OFFICER

June 10, 2020

Daniel Boone National Forest
ATTN: Ms. Melissa Ramsey
3320 Highway 27 North
Whitley City, KY 42653

Re: **Archaeological Survey of the McCreary County Junction – Kentucky Utilities Wofford Transmission Line Rebuild Project in McCreary and Whitely Counties, Kentucky,** prepared by J. Howard Beverly of Cultural Resource Analysts. Report dated April 13, 2020.

Dear Ms. Ramsey:

Thank you for your letter and enclosed above-mentioned reports, received May 11, 2020. We understand East Kentucky Power Cooperative proposes to rebuild a approximately 33 km long transmission line between the EKPC Whitley City 69 kV distribution substation and the Kentucky Utilities Wofford 69 kV distribution substation. We understand that the project area encompasses 390 acres. Approximately 247 acres of the project area falls within a Area of Potential Effect for the project consists of the 30 m x 33.3 km transmission line right-of-way corridor. We additionally understand that 26.7 km of 6 m wide access road corridor will be improved or constructed, totaling approximately 40 acres. We understand the report to describe the archaeological survey of approximately 375 acres of land including all of the transmission line corridor and the majority of the access road corridors. We understand that the project is funded through the United States Department of Agriculture Rural Utilities Service program, but that United States Forest Service will serve as the lead federal agency for the project.

We previously reviewed the assessment of above-ground effects for this project. In a letter dated April 16, 2020, we concurred that no above-ground resources would be adversely affected by the proposed project.

The archaeological report describes the intensive pedestrian reconnaissance, supplemented by screened shovel testing and floodplain augering, of the 375 acres of the project area. During the survey, the investigators revisited two previously reported sites – 15McY719 and 15McY1009. The investigators also identified eight new archaeological sites – 15McY1363, 15McY1368, 15McY1369, 15Wh244, 15Wh245, 15Wh246, 15Wh247, and 15Wh248 – and made four isolated artifact finds.

No evidence of the previously recorded site 15McY1009 was encountered in the survey area. The site, however, may be located outside of the survey area, and we will withhold comment on the site at this point.

Sites 15McY719, 15McY1363, 15McY1368, 15McY1369, 15Wh244, and 15Wh247 are rockshelters. Based on the results of the survey, the investigators recommended that sties 15McY719, 15McY1363, 15McY1368, and 15McY1369 are not eligible for the NRHP. Sites 15Wh245, 15Wh246, and 15Wh248 are primarily prehistoric open habitations, although some modern historic artifacts were encountered at these sites as well at 15Wh245.

Daniel Boone National Forest (DBNF) determined that not enough information had been gathered at 15McY719, and recommended additional work to establish its NRHP eligibility or avoidance of the site. We concur with this determination.

(Continued on next page.)

DBNF determined that sites 15McY1363, 15McY1368, and 15McY1369 are not eligible for the NRHP. We concur with this determination.

DBNF determined, in accord with the investigator's recommendations, that sites 15Wh244 and 15Wh247 should be assessed further to determine their NRHP eligibility or avoided by the project. We concur with this determination.

The investigator recommended that the boundaries of sites 15Wh245, 15Wh246, and 15Wh248 were not fully established, and likely extend past the survey boundaries of the project. The investigators recommended that no deposits eligible for the NRHP were located within the project area, and DBNF agreed with this recommendation. We will withhold comment on the eligibility of these sites, as additional work is needed to fully define these resources. However, we do agree that the investigator's findings are recommendations for these sites.

The four isolated artifact finds represent single finds of prehistoric or historic materials. In accord with the investigator's recommendations, DBNF determined that these locations were not eligible for the NRHP.

After review of the report, we accept it as final and acknowledge receipt of three archival copies.

DBNF determined that none of the sites identified in the survey would be affected by the proposed undertaking. We understand that, in part, this determination was made after consideration of EKPC's proposals to block access roads after construction activities were completed. After review of the report, we cannot concur that site 15Wh244 will not be adversely affected by the proposed undertaking, and we recommend either a stronger avoidance measure, such as gating the cave entrance, is completed prior to the initiation of the project or that additional work to more fully assess the site's NRHP eligibility is performed. This site is directly adjacent to the access road, and we believe that, regardless of EKPC's proposals to block the access road, that the act of clearing the access road will provide increased access to this site.

Should you have any questions concerning archaeological resources, feel free to contact Chris Gunn of my staff at (502) 892-3615 or chris.gunn@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer

CP:cmg, KHC # 57459
cc: George Crothers (OSA)

United States Department of Agriculture
Forest Service
Daniel Boone National Forest
Stearns Ranger District
3320 Highway 27 North
Whitley City, KY 42653
606-376-5323

File Code: 2360
Date: June 29, 2020

Craig Potts
Executive Director and State Historic Preservation Officer
410 High Street
Frankfort, KY 40601

Dear Mr. Potts:

Thank you for your letter, dated June 10, 2020, concerning the report *Archaeological Survey of the McCreary County Junction - Kentucky Utilities Wofford Transmission Line Rebuild Project in McCreary and Whitely Counties, Kentucky*. We understand your concern with the proximity of an access road to site 15Wh244, as the site is potentially eligible for the National Register and had undergone a fair amount of illegal digging in the past. Attached is a document showing maps and photographs of the area, the site, and the access road. As you can see, despite being adjacent to 15Wh244, the access road is positioned on the ridge above the line of rock overhangs where the site is located. The site is not easily visible from the access road and cannot be easily reached directly from the access road.

East Kentucky Power Cooperative (EKPC) has committed to the installation of a new, USFS approved steel gate to be located at the junction of the access road and KY Hwy 478. Additional measures, such as boulders or tank traps, may be implemented adjacent to the gate if needed to prevent access around said gate. The gate will be positioned on the access road, which is not a Forest Service system road, so that it is visible from the highway. The position will not only deter vehicles from attempting to drive down the access road, but will also mean anyone attempting to remove or damage the gate will be highly exposed and visible. EKPC has further committed to annual monitoring and maintenance of this gate.

We believe, given the location of the access road in relation to site 15Wh244, that the installation of a locked gate at the junction with the highway will be a strong enough avoidance measure to adequately prevent adverse effects to the site.

We submit this plan and effects statement for your further consideration and comment. Please contact Melissa Ramsey of my staff, melissa.ramsey@usda.gov, if you have any further questions or concerns.

Sincerely,

X 

Signed by: TIMOTHY REED

TIMOTHY REED District Ranger

cc: Wayna Adams

To deter future site access, proposed new gate would be located on existing access road near intersection with Hwy 478, with added barriers adjacent to gate if needed.

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

15Wh244

AY-64

AY-65

478

Red Bird Rd

bing

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

Site 15Wh244 Photo Locations Map

N

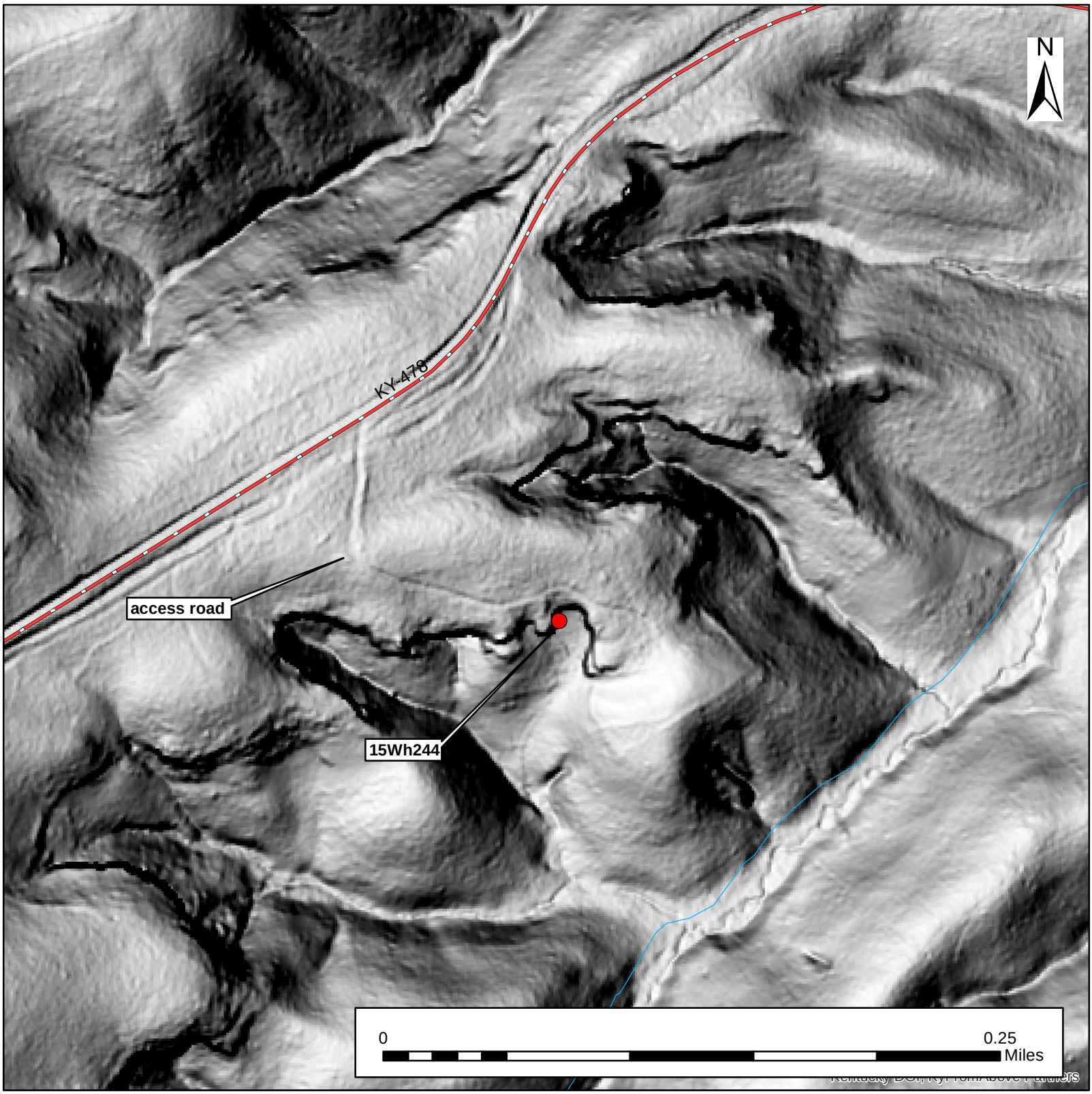
Proposed Rebuild

Proposed Structures

Existing Structures

0 75 150 300 Feet

LiDAR image of site with access road.



USDA Forest Service Image
Created 6/2020 by M. Ramsey

Photo 1: View of access road entrance from HWY 478, facing south.

Photo 2: Vegetation around entrance to access road

Photo 3. View west from existing access road above cliffline to the top of Site 15Wh244

Photo 4. View northwest from existing access road above cliffline to the mouth of cave – Site 15Wh244

Photo 5. View north of Site 15Wh244 from existing right-of-way, site being accessed from this location

Photo 6. View to the north of mouth of cave – Site 15Wh244, existing access road located above cliffline to north

ANDY BESHEAR
GOVERNOR

JACQUELINE COLEMAN
LT. GOVERNOR

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MICHAEL E. BERRY
SECRETARY

CRAIG A. POTTS
EXECUTIVE DIRECTOR &
STATE HISTORIC
PRESERVATION OFFICER

July 30, 2020

Ms. Melissa Ramsey
Daniel Boone National Forest, Stearns Ranger District
3320 Highway 27 North
Whitley City, KY 42653

Re: Avoidance measures for 15Wh244
EKPC McCreary County Junction – Wofford Transmission Line Rebuild Project

Dear Ms. Ramsey:

Thank you for your letter concerning the proposed avoidance measures for site 15Wh244, a cave site recommended as potentially eligible for the National Register of Historic Places and which lies within the Area of Potential Effect for the above-mentioned project.

In our initial review of the project, dated June 10, 2020, we indicated that we felt that the act of clearing the access road would facilitate access to 15Wh244, which has already been targeted by looters, thereby increasing the likelihood that project activities would increase the danger of additional disturbance to this site. We understood from the initial consultation material that EKPC proposed to close the road after project activities were completed.

After review of your letter, we do not understand that there is an appreciable difference in the avoidance measure being proposed now and the avoidance measure proposed during the initial consultation. Our concerns about increased ease of access to the site remain. At this time, we request to continue consultation with Daniel Boone National Forest and other parties and Tribes consulting on this project and its effects in order to reach a consensus on an appropriate treatment plan for this resource.

We look forward to continuing consultation with you. Should you have any questions concerning archaeological resources, feel free to contact Chris Gunn of my staff at (502) 892-3615 or chris.gunn@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer

CP:cmg, jr KHC # 57459, 58706

KENTUCKY TOURISM, ARTS & HERITAGE CABINET

We have received your response letter, dated July 30, 2020. We understand that your main concern is that the EKPC project will increase the ease of access to site 15Wh244, "thereby increasing the likelihood that project activities would increase the danger of additional disturbance at the site." We would like to take one more opportunity to present information that explains why we believe the measures described will ***decrease*** access to the site following project completion.

Following are the reasons we believe site access will be significantly more difficult following project completion:

- First, very little clearing will be necessary for use of the access road in question. Any clearing performed along the access road will be limited to the cutting of overhead limbs and minimal brushing along the sides of the road.
- The road has been passable for a long time and will now, as a result of this project, be gated, making the site *harder,* not easier, to get to. We noted that boulders and tank traps can be placed around the gate, making the possibility of driving around the gate very difficult to impossible.
- Finally, as we noted, the site cannot readily be accessed or seen from the road, which passes directly *above* site 15Wh244. One must travel the road a bit and look back to see the site. ~~The~~ To actually access the site, one must travel all the way out the access road to the transmission line corridor, walk the power corridor for a short bit, and then walk back along the ridgeline below the site to get back to the site.

Therefore, based on the reasons above, we believe the site will actually be *significantly* less accessible following this project than it is currently.

Furthermore, we feel it important to point out that work performed in order to install a bat gate at the mouth of the rockshelter site would require even more clearing and use of the access road, as well as clearing of a path between the power corridor and the site itself in order to transport in the proper equipment and the gate components themselves. The installation of the bat gate will also involve the disturbance of soil at the mouth of the rockshelter, which, as you can see from the site description in the report, contains possible intact deposits and was the location of a diagnostic artifact. In the event a bat gate is installed, not only would the further clearance of access to the site be created, but the site would be impacted/damaged by the installation itself. Anchors for a bat gate must be drilled into bedrock and the floor of the shelter *to a depth of anywhere from 6 inches to 24 inches* (a personal communication from Abandoned Mine Lands personnel). A keyed gate at the entrance to the access road at KY Highway 478 will, in the opinion of the Daniel Boone National Forest be an effective measure to impede access to site 15Wh244, with minimal ground disturbance.

We submit this response for your further consideration and comment. If you still feel you do not agree with our opinion, please contact the Forest Archaeologist, Wayna Adams wayna.adams@usda.gov to set up a meeting where we can continue to consultation.

ANDY BESHEAR
GOVERNOR

JACQUELINE COLEMAN
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CRAIG A. POTTS
EXECUTIVE DIRECTOR &
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September 9, 2020

Mr. Timothy Reed
Daniel Boone National Forest
3320 Highway 27 North
Whitley City, KY 42653

Re: additional consultation, EKPC McCreary County Junction – Kentucky Utilities Wofford Transmission Line Rebuild Project

Dear Mr. Reed:

Thank you for your email and attached letter concerning continuing consultation on the above-mentioned project, received August 14, 2020. We previously voiced concerns about potential adverse effects to 15Wh244 that could result from clearing and use of an access road that runs adjacent to the site. The site a rockshelter with signs of looting, was identified during cultural resources survey for this project. The investigators recommended that the site is potentially eligible for the National Register of Historic Places and that additional evaluation of its NRHP eligibility or avoidance as possible management strategies. In our initial review of the survey report, dated June 10, 2020, we concurred with Daniel Boone National Forest's (DBNF) determination of the site's eligibility. We understood at that time that DBNF proposed that adverse effects to the site would be avoided by gating the access road after completion of project activities. At that time, we voiced our concern that clearing and use of the road would facilitate access and continued looting of the site.

We appreciate the clarification that the access road passing by the site requires very little clearing. Our main concern that we voiced previously was that clearing the road would facilitate access to the site. We now understand that the proposed gating would serve to diminish the current ease of access to the site along this access road.

We previously indicated our concurrence in our April 16, 2020 letter that no above-ground resources would be adversely affected by the proposed project. In our previous review of the archaeological report (June 10, 2020), we concurred with DBNF's determination that 15McY1363, 15McY1368, and 15McY1369 are not eligible for the NRHP. We also concurred with DBNF's determination that the NRHP eligibility of sites 15McY719, 15Wh244, and 15Wh247 has not been determined, and that the sites should be subjected to additional assessment or avoided. Finally, we concurred with DBNF that the boundaries of sites 15Wh245, 15Wh246, and 15Wh248 were not fully established, but that no significant findings had been made in the portions of the site identified.

With the understanding that all access roads necessary for this project will be gated at the end of the project, we concur with DBNF's determination that the proposed project will result in No Adverse Effect to Historic Properties. If this condition cannot be met, then additional consultation with our office on the project's effects to potentially eligible resources within the project's APE would be warranted.

(Continued on next page.)

In the event of the unanticipated discovery of an archaeological site or object of antiquity, the discovery should be reported to the Kentucky Heritage Council and to the Kentucky Office of State Archaeology in the Anthropology Department at the University of Kentucky in accordance with KRS 164.730. In the event that human remains are encountered during project activities, all work should be immediately stopped in the area and the area cordoned off, and in accordance with KRS 72.020 the county coroner and local law enforcement must be contacted immediately. Upon confirmation that the human remains are not of forensic interest, the unanticipated discovery must be reported to the Kentucky Heritage Council.

Should you have any questions concerning archaeological resources, feel free to contact Chris Gunn of my staff at (502) 892-3615 or chris.gunn@ky.gov. Questions concerning above-ground resources can be directed to Jennifer Ryall at (502) 892-3619 or jennifer.ryall@ky.gov.

Sincerely,

Craig A. Potts,
Executive Director and
State Historic Preservation Officer

CP:cmg, jr KHC # 57459, 58706, 59523

EAST KENTUCKY POWER COOPERATIVE

May 23, 2019

Ms. Dana Kelly
Historic Preservation/106 Asst.
Delaware Nation
PO Box 825
Anadarko, OK 73005

SUBJECT: Notification of Intent to Initiate Section 106 Review
McCreary County Jct.-KU Wofford 69 kilovolt Line Rebuild Project
McCreary and Whitley Counties, Kentucky

Dear Ms. Kelly,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed McCreary County Junction-KU Wofford 69 kilovolt (kV) Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild the existing McCreary County Junction-Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres. The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. EKPC is proposing the McCreary County Jct.-KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures” (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on

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Fax: (859) 744-6008
http://www.ekpc.coop

behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 20.7-mile long, 100 foot-wide existing transmission line right-of-way easement where project impacts are anticipated. EKPC is also proposing to investigate 50-foot wide corridors within which the proposed 16.6 miles of approximately 15-ft wide access roads would be located, outside of the 100-foot wide line survey area. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of Delaware Nation in McCreary and Whitley Counties. Should the Delaware Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than June 24, 2019. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Environmental Scientist, (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

May 23, 2019

Ms. Holly Austin
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
PO Box 455
Cherokee, NC 28719

SUBJECT: Notification of Intent to Initiate Section 106 Review
McCreary County Jct.-KU Wofford 69 kilovolt Line Rebuild Project
McCreary and Whitley Counties, Kentucky

Dear Ms. Austin,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed McCreary County Junction-KU Wofford 69 kilovolt (kV) Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild the existing McCreary County Junction-Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres. The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. EKPC is proposing the McCreary County Jct.-KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures” (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707
Tel. (859) 744-4812
Fax: (859) 744-6008
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behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 20.7-mile long, 100 foot-wide existing transmission line right-of-way easement where project impacts are anticipated. EKPC is also proposing to investigate 50-foot wide corridors within which the proposed 16.6 miles of approximately 15-ft wide access roads would be located, outside of the 100-foot wide line survey area. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of the Eastern Band of Cherokee Indians in McCreary and Whitley Counties. Should the Eastern Band of Cherokee Indians elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than June 24, 2019. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Environmental Scientist, (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

May 23, 2019

Mr. Russell Townsend
Tribal Historic Preservation Officer
Eastern Band of Cherokee Indians
PO Box 455
Cherokee, NC 28719

SUBJECT: Notification of Intent to Initiate Section 106 Review
McCreary County Jct.-KU Wofford 69 kilovolt Line Rebuild Project
McCreary and Whitley Counties, Kentucky

Dear Mr. Townsend,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed McCreary County Junction-KU Wofford 69 kilovolt (kV) Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild the existing McCreary County Junction-Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres. The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. EKPC is proposing the McCreary County Jct.-KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures” (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on

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EKPC proposes that the area of potential effects (APE) for the referenced project consists of the 20.7-mile long, 100 foot-wide existing transmission line right-of-way easement where project impacts are anticipated. EKPC is also proposing to investigate 50-foot wide corridors within which the proposed 16.6 miles of approximately 15-ft wide access roads would be located, outside of the 100-foot wide line survey area. The geographic scope of the APE will not be final until a determination is made by RUS pursuant to 36 CFR § 800.4 (a)(1). The APE does not include any Tribal lands as defined pursuant to 36 CFR § 800.16(x).

EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of Eastern Band of Cherokee Indians in McCreary and Whitley Counties. Should the Eastern Band of Cherokee Indians elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than June 24, 2019. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

If at any time you wish to share your interests, recommendations and concerns directly with RUS, as the agency responsible for conducting Section 106 review, or to request that RUS participate directly in Section 106 review, please notify me at once, preferably via email. However, you may contact RUS directly. If you wish to do so, please submit your request to Lauren Rayburn, Environmental Scientist, (202) 695-2540 or *lauren.rayburn@wdc.usda.gov*.

Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

EAST KENTUCKY POWER COOPERATIVE

May 23, 2019

Ms. Diane Hunter
Tribal Historic Preservation Officer
Miami Nation
PO Box 1326
Miami, OK 74354

SUBJECT: Notification of Intent to Initiate Section 106 Review
McCreary County Jct.-KU Wofford 69 kilovolt Line Rebuild Project
McCreary and Whitley Counties, Kentucky

Dear Ms. Hunter,

The Rural Utilities Service (RUS), one of three agencies comprising USDA Rural Development, is authorized under the Rural Electrification Act of 1936, as amended, to provide federal financial assistance for the construction, improvement and expansions of electrical infrastructure in eligible rural communities in the United States. East Kentucky Power Cooperative, Inc. (EKPC) plans to seek financial assistance from RUS for construction of the proposed McCreary County Junction-KU Wofford 69 kilovolt (kV) Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky as shown on the enclosed maps.

EKPC is proposing to rebuild the existing McCreary County Junction-Kentucky Utilities (KU) Wofford 69 kV Transmission Line section located in portions of McCreary and Whitley Counties, Kentucky. The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres. The proposed project would consist of removing the existing transmission line and associated wood pole structures, and construction of the new line in its place, within the existing 100-foot-wide right-of-way (ROW) easement. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. EKPC is proposing the McCreary County Jct.-KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. Additionally, EKPC has determined that the existing wooden transmission line support structures, many of which are the original structures and would not be able to support the weight of the larger conductor; therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

If RUS elects to fund this application, it will become an undertaking subject to review under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108, and its implementing regulations, 36 CFR Part 800. Pursuant to 7 CFR § 1970.5 (b) (2) of the regulations, “Environmental Policies and Procedures” (7 CFR Part 1970), RUS has issued a blanket delegation to its borrowers to initiate and proceed through Section 106 review. In accordance with this blanket delegation, EKPC is initiating section 106 review on

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behalf of RUS. In delegating this authority, RUS is advocating for the direct interaction between its borrowers and the Indian tribes. RUS believes that this interaction, prior to direct agency involvement, will support and encourage the consideration of impacts to historic properties of importance to Indian tribes earlier in the project planning.

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EKPC has contracted with a professional archaeologist to conduct a Phase I archaeological investigation within the proposed project APE in accordance with current Kentucky State Historic Preservation Office guidelines. A survey report will be developed and submitted to the Kentucky Heritage Council for their review.

EKPC is notifying you about the referenced project because of the possible interest of Miami Nation in McCreary and Whitley Counties. Should the Miami Nation elect to participate in Section 106 review of the referenced project please notify me as soon as possible, but no later than June 24, 2019. EKPC has been advised by RUS to proceed to the next step in Section 106 review if you fail to provide a timely response. Please submit your response in writing via letter or email at the following address – Josh Young, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, KY, 40391 or *josh.young@ekpc.coop*.

Please include with your affirmative response, a description of any specific historic properties or important tribal resources in the APE and your recommendations about the level of effort needed to identify additional historic properties which might be affected by the referenced project. EKPC will respect the confidentiality of the information which you provide to the fullest extent possible.

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Thank you for your review of this project information, should you have any questions or require additional information, I can also be reached via phone at (859) 745-9799.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

Whitley City

Whitley City, WHITLEY CITY

Jenneys Branch

Fork Bridge

Laurel Creek

Indian Knob

Rock Bridge Branch

Apple Tree Branch

East Laurel

Elisha Creek

Wright Branch

Gilreath Cem

D A N I E L B O O N E

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

- Cultural Historic APE
- Archaeology APE
- Proposed Rebuild
- Proposed Structures
- Existing Structures
- Access Roads
- Existing EKPC Transmission
- Existing KU Transmission Lines
- DBNF Property

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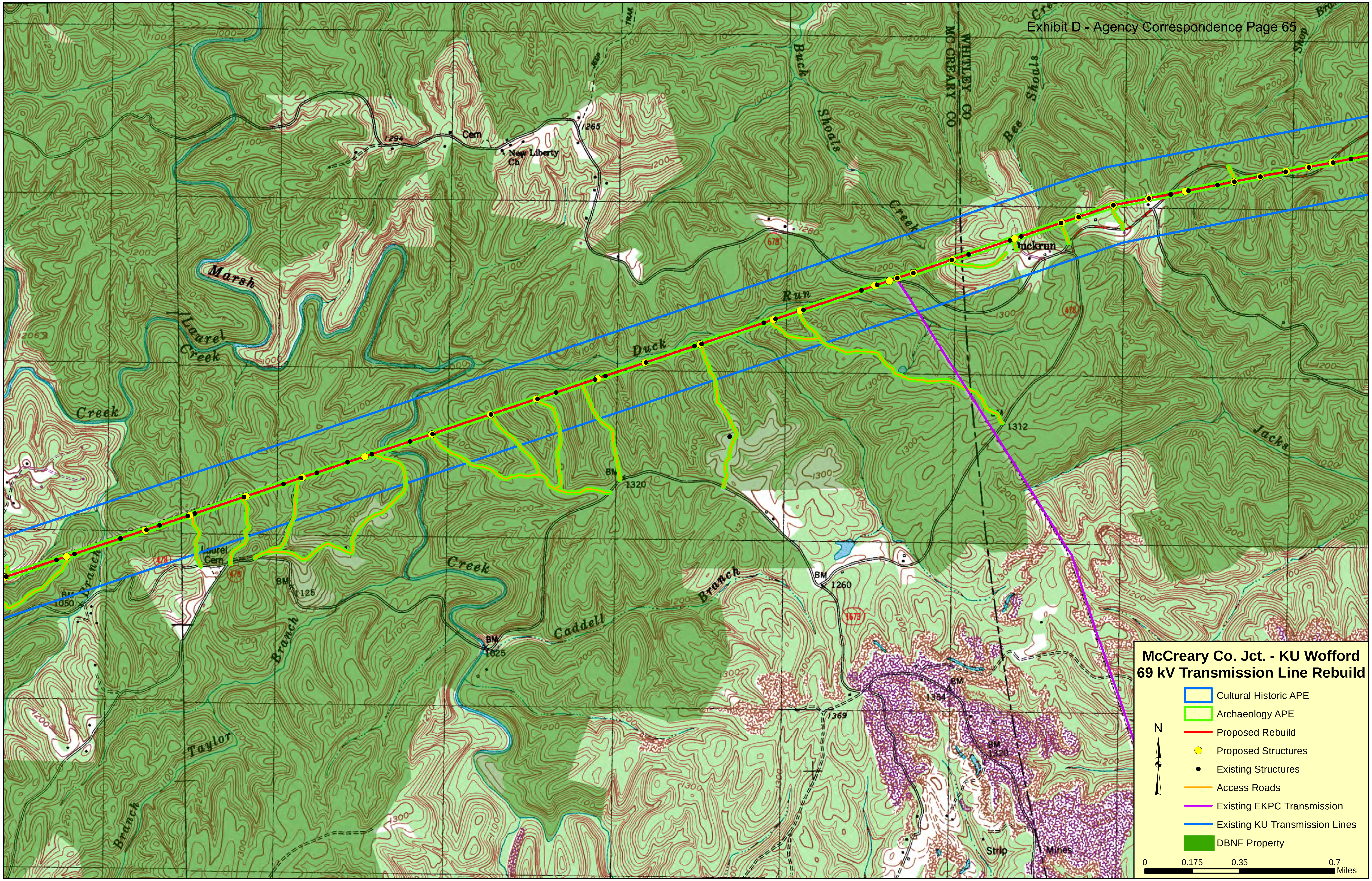
0 0.175 0.35 0.7 Miles


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
Cultural Historic APE
Archaeology APE
Proposed Rebuild
Proposed Structures
Existing Structures
Access Roads
Existing EKPC Transmission
Existing KU Transmission Lines
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MC CREARY CO
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New Liberty
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1369
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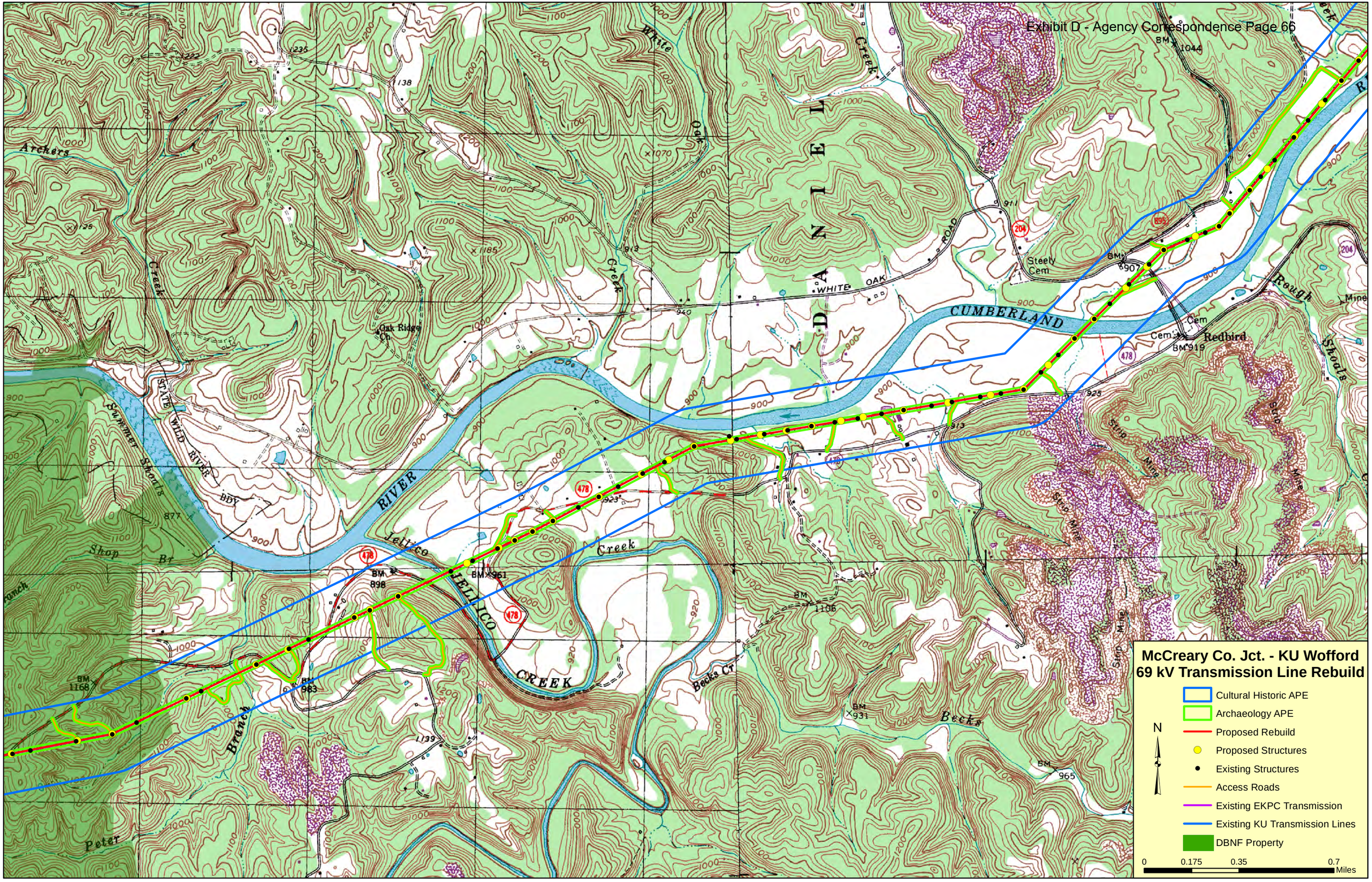
Mines


McCreary Co. Jct. - KU Wofford
69 kV Transmission Line Rebuild
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Becks
Peter
Shop Br
Branch
Summer Shouts
WILD RIVER
BDY
Rough
Mine
Strip Mine
STATE

McCreary Co. Jct. - KU Wofford 69 kV Transmission Line Rebuild

- Cultural Historic APE
- Archaeology APE
- Proposed Rebuild
- Proposed Structures
- Existing Structures
- Access Roads
- Existing EKPC Transmission
- Existing KU Transmission Lines
- DBNF Property

N

0 0.175 0.35 0.7 Miles

EAST KENTUCKY POWER COOPERATIVE

August 5, 2019

The McCreary County Voice
57 Oaks Lane, Suite 9
Whitley City, KY 42653

Re: Public Notice Regarding the Planned McCreary County Junction-KU Wofford Transmission Line Rebuild Project in McCreary and Whitley Counties, Kentucky

To Whom It May Concern:

I would like to place a public notice to run one day in early August, 2019. Please follow this request by emailing a proof and the cost for placing the notice. The public notice I wish to place reads as follows:

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of McCreary and Whitley Counties. The existing McCreary County Jct. – KU Wofford transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County.

The U.S. Department of Agriculture, Rural Utilities Service (RUS) is considering an application from EKPC for financial assistance to construct the proposed project. Actions taken by the agency for the referenced project may be undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). This act requires federal agencies to consider the effects of its undertakings on important historic properties listed or eligible for listing in the National Register of Historic Places (NRHP).

On behalf of RUS, EKPC is seeking to identify persons who are interested in participating in the process for evaluating the potential effects of this proposed project on historic properties located in the project area that are listed or eligible for listing in the NRHP. If you have a legal or economic relation to properties that will be affected by the proposed project, or if you have a demonstrable interest in the historic built and/or archaeological environment in the project area, you are invited to participate as a consulting party in the Section 106 review process. If you believe you meet these criteria and you wish to participate as a consulting party, please send a letter with your contact information and statement of

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
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interest, to Josh Young at josh.young@ekpc.coop, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.

Please send an affidavit or a tear sheet once the public notice has been circulated. If you need any further information or wish to discuss this project, please feel free to contact Josh Young at (859) 745-9799 or by email at josh.young@ekpc.coop.

Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC)
Steve Anderson (EKPC)
Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

AFFIDAVIT OF PUBLICATION

I, Patricia Stephens

Of the McCreary County Voice, a weekly newspaper, holding a mailing permit, published in Whitley City, county of McCreary, Commonwealth of Kentucky, do swear and subscribe that the attached proof of publication of a legal notice was published in said newspaper in the issue of

August 8, 2019 a 2 Col. X 7.5"

Legal Notice

a 15" ad for which the sum of $ 75.00 is ~~due and payable.~~ paid.

Signed: Patricia Stephens

Title: Publisher

Subscribed and sworn to before me, a notary public for the County of McCreary, Commonwealth of Kentucky this 8th day of August, 20 19.

My commission expires 03/27/23.

Sandy W. Stephens

CLASSIFIEDS

Sell your stuff, advertise jobs or a place to rent. **You can do it all here!**

AUTOS | EMPLOYMENT | LEGALS | YARD SALE

Let The Voice Classifieds and Channel 21 do the work for you. Call 376-5500 or visit our office at The Oaks to find out how.

$5.00 for 20 words or less; 25¢ each additional word.

LEGAL

NOTICE
SPECIAL MEETING OF THE BOARD OF DIRECTORS OF HIGHLAND TELEPHONE COOPERATIVE, INC. MCCREARY COUNTY, KENTUCKY

PURSUANT TO ARTICLE V, SECTION 2 OF ITS BYLAWS, THE BOARD OF DIRECTORS FOR HIGHLAND TELEPHONE COOPERATIVE, INC. WOULD LIKE TO INVITE ITS MEMBERSHIP AND THE NEWS MEDIA TO ATTEND

A SPECIAL MEETING OF THE BOARD OF DIRECTORS TO BE HELD ON MONDAY, AUGUST 12, 2019 AT 6:30 P.M. AT THE MCCREARY COUNTY BRANCH OFFICE IN WHITLEY CITY, KENTUCKY.

YOU ARE CORDIALLY INVITED TO ATTEND AND SHARE WITH THE BOARD YOUR COMMENTS OR CONCERNS.

MARK PATTERSON
GENERAL MANAGER
HIGHLAND TELEPHONE COOPERATIVE, INC.

HTC Technology For You
Where hometown meets world class

THIS INSTITUTION IS AN EQUAL OPPORTUNITY PROVIDER AND EMPLOYER.
PAID ADVERTISEMENT BY HIGHLAND TELEPHONE COOPERATIVE, INC.

CHILD FIND FOR CHILDREN WITH DISABILITIES IN NEED OF SPECIAL EDUCATION OR 504 SERVICES CHILD FIND

THE MCCREARY COUNTY SCHOOL DISTRICT KEEPS EDUCATIONAL RECORDS IN A SECURE LOCATION IN EACH SCHOOL AND BOARD OFFICE.

THE MCCREARY COUNTY SCHOOL DISTRICT OBTAINS WRITTEN CONSENT FROM A PARENT OR ELIGIBLE STUDENT (AGE 18 OR WHO IS ATTENDING A POSTSECONDARY INSTITUTION), BEFORE DISCLOSING PERSONALLY IDENTIFIABLE INFORMATION TO AN ENTITY OR INDIVIDUAL NOT AUTHORIZED TO RECEIVE IT UNDER FERPA.

FOR STUDENTS WHO HAVE BEEN DETERMINED ELIGIBLE FOR SPECIAL EDUCATION, EDUCATIONAL RECORDS WILL BE DESTROYED AT THE REQUEST OF THE PARENTS WHEN THEY ARE NO LONGER NEEDED TO PROVIDE EDUCATIONAL PROGRAMS OR SERVICES. THE MCCREARY COUNTY SCHOOL DISTRICT MAY DESTROY THE EDUCATIONAL RECORDS OF A CHILD WITHOUT PARENT REQUEST 3 YEARS AFTER THEY ARE NO LONGER NEEDED TO PROVIDE EDUCATIONAL PROGRAMS OR SERVICES. PARENTS ARE ADVISED THAT DATA CONTAINED IN THE RECORDS MAY LATER BE NEEDED FOR SOCIAL SECURITY BENEFITS OR OTHER PURPOSES. THE MCCREARY COUNTY SCHOOL DISTRICT MAY RETAIN, FOR AN INDEFINITE PERIOD OF TIME, A RECORD OF THE STUDENT'S NAME, ADDRESS, TELEPHONE NUMBER, GRADES, ATTENDANCE RECORDS, CLASSES ATTENDED, GRADE LEVEL COMPLETED, AND YEAR COMPLETED.

CHILDREN ELIGIBLE FOR SPECIAL EDUCATION INCLUDE THOSE CHILDREN WITH DISABILITIES WHO HAVE AUTISM, DEAF-BLINDNESS, DEVELOPMENTAL DELAY, EMOTIONAL-BEHAVIOR DISABILITY, HEARING IMPAIRMENT, MENTAL DISABILITY, MULTIPLE DISABILITIES, ORTHOPEDIC IMPAIRMENT, OTHER HEALTH IMPAIRMENT, SPECIFIC LEARNING DISABILITY, SPEECH OR LANGUAGE IMPAIRMENT, TRAUMATIC BRAIN INJURY, OR VISUAL IMPAIRMENT AND WHO BECAUSE OF SUCH AN IMPAIRMENT NEED SPECIAL EDUCATION SERVICES.

CHILDREN ELIGIBLE FOR 504 SERVICES INCLUDE THOSE CHILDREN IN A PUBLIC ELEMENTARY AND SECONDARY EDUCATION PROGRAM WHO HAVE A CURRENT PHYSICAL OR MENTAL IMPAIRMENT THAT CURRENTLY SUBSTANTIALLY LIMITS SOME MAJOR LIFE ACTIVITY WHICH CAUSES THE STUDENT'S ABILITY TO ACCESS THE SCHOOL ENVIRONMENT OR SCHOOL ACTIVITIES TO BE SUBSTANTIALLY LIMITED.

CHILDREN ELIGIBLE FOR THE STATE-FUNDED PRESCHOOL PROGRAM INCLUDE THREE- AND FOUR-YEAR-OLD CHILDREN IDENTIFIED WITH DISABILITIES AND FOUR-YEAR-OLD CHILDREN WHO ARE AT-RISK, AS DEFINED BY FEDERAL POVERTY LEVELS UP TO 150%. PRESCHOOL CHILDREN ELIGIBLE FOR SPECIAL EDUCATION MUST HAVE AN INDIVIDUAL EDUCATION PLAN (IEP) INSTEAD OF A 504

ACCEPTING BIDS

THE MCCREARY COUNTY FISCAL COURT IS ACCEPTING BIDS FOR SERVICES TO PROMOTE OUR SPEC BUILDING IN PINE KNOT. WE WILL BE CREATING A NEW WEBSITE AND PUBLISHING BUSINESS PORTFOLIOS THAT PROMOTE THE MCCREARY COUNTY INDUSTRIAL SITE AND ITS CAPABILITIES. THEY SHOULD CONTACT THE ECONOMIC DEVELOPMENT DIRECTOR, NATHAN NEVELS AT THE COURTHOUSE: (606)376-2413 OR EMAIL HIM AT NATHAN.NEVELS@MCCREARYCOUNTY.COM FOR MORE INFORMATION.

NOTICE

EAST KENTUCKY POWER COOPERATIVE, INC. (EKPC) IS PROPOSING A TRANSMISSION LINE REBUILD PROJECT IN PORTIONS OF MCCREARY AND WHITLEY COUNTIES. THE EXISTING MCCREARY COUNTY JCT. – KU WOFFORD TRANSMISSION LINE SECTION THAT WOULD BE REBUILT IS APPROXIMATELY 20.7 MILES IN LENGTH AND GENERALLY ORIENTED EAST TO WEST, ROUGHLY PARALLELING KY HWY 478 BETWEEN THE EXISTING EKPC WHITLEY CITY AND KU WOFFORD 69 KV DISTRIBUTION SUBSTATIONS. THE MCCREARY COUNTY JCT. (WHITLEY CITY SUBSTATION) IS LOCATED ON THE EAST SIDE OF US HWY 27, 0.4-MILE SOUTH OF KY HWY 478 (WILLIAMSBURG ROAD) IN MCCREARY COUNTY. THE KU WOFFORD SUBSTATION IS LOCATED ON THE NORTH SIDE OF KY HWY 779 (BROWNS CREEK ROAD), 0.4-MILE WEST OF KY HWY 26 IN WHITLEY COUNTY.

THE U.S. DEPARTMENT OF AGRICULTURE, RURAL UTILITIES SERVICE (RUS) IS CONSIDERING AN APPLICATION FROM EKPC FOR FINANCIAL ASSISTANCE TO CONSTRUCT THE PROPOSED PROJECT. ACTIONS TAKEN BY THE AGENCY FOR THE REFERENCED PROJECT MAY BE UNDERTAKINGS SUBJECT TO REVIEW UNDER SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT, 16 U.S.C. § 470F, AND ITS IMPLEMENTING REGULATIONS, "PROTECTION OF HISTORIC PROPERTIES" (36 CFR PART 800). THIS ACT REQUIRES FEDERAL AGENCIES TO CONSIDER THE EFFECTS OF ITS UNDERTAKINGS ON IMPORTANT HISTORIC PROPERTIES LISTED OR ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES (NHRP).

ON BEHALF OF RUS, EKPC IS SEEKING TO IDENTIFY PERSONS WHO ARE INTERESTED IN PARTICIPATING IN THE PROCESS FOR EVALUATING THE POTENTIAL EFFECTS OF THIS PROPOSED PROJECT ON HISTORIC PROPERTIES LOCATED IN THE PROJECT AREA THAT ARE LISTED OR ELIGIBLE FOR LISTING IN THE NHRP. IF YOU HAVE A LEGAL OR ECONOMIC RELATION TO PROPERTIES THAT WILL BE AFFECTED BY THE PROPOSED PROJECT, OR IF YOU HAVE A DEMONSTRABLE INTEREST IN THE HISTORIC BUILT AND/OR ARCHAEOLOGICAL ENVIRONMENT IN THE PROJECT AREA, YOU ARE INVITED TO PARTICIPATE AS A CONSULTING PARTY IN THE SECTION 106 REVIEW PROCESS. IF YOU BELIEVE YOU MEET THESE CRITERIA AND YOU WISH TO PARTICIPATE AS A CONSULTING PARTY, PLEASE SEND A LETTER WITH YOUR CONTACT INFORMATION AND STATEMENT OF INTEREST, TO JOSH YOUNG AT JOSH.YOUNG@EKPC.COOP, OR AT EAST KENTUCKY POWER COOPERATIVE, 4775 LEXINGTON ROAD, WINCHESTER, KY 40391.

STATEWIDES

EAST KENTUCKY POWER COOPERATIVE

August 5, 2019

The News Journal
PO Box 1524
Corbin, KY 40702

Re: Public Notice Regarding the Planned McCreary County Junction-KU Wofford Transmission Line Rebuild Project in McCreary and Whitley Counties, Kentucky

To Whom It May Concern:

I would like to place a public notice to run one day in early August, 2019. Please follow this request by emailing a proof and the cost for placing the notice. The public notice I wish to place reads as follows:

Notice: East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of McCreary and Whitley Counties. The existing McCreary County Jct. – KU Wofford transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County.

The U.S. Department of Agriculture, Rural Utilities Service (RUS) is considering an application from EKPC for financial assistance to construct the proposed project. Actions taken by the agency for the referenced project may be undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). This act requires federal agencies to consider the effects of its undertakings on important historic properties listed or eligible for listing in the National Register of Historic Places (NRHP).

On behalf of RUS, EKPC is seeking to identify persons who are interested in participating in the process for evaluating the potential effects of this proposed project on historic properties located in the project area that are listed or eligible for listing in the NRHP. If you have a legal or economic relation to properties that will be affected by the proposed project, or if you have a demonstrable interest in the historic built and/or archaeological environment in the project area, you are invited to participate as a consulting party in the Section 106 review process. If you believe you meet these criteria and you wish to participate as a consulting party, please send a letter with your contact information and statement of

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

interest, to Josh Young at josh.young@ekpc.coop, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.

Please send an affidavit or a tear sheet once the public notice has been circulated. If you need any further information or wish to discuss this project, please feel free to contact Josh Young at (859) 745-9799 or by email at josh.young@ekpc.coop.

Thank you very much for your assistance in this matter.

Sincerely,

Josh Young
Supervisor Natural Resources
& Environmental Communications

Enclosures

cc: Jerry Purvis (EKPC)
Steve Anderson (EKPC)
Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

AFFIDAVIT OF PUBLICATION

I, TRENT KNUCKLES, PUBLISHER OF **THE WHITLEY/CORBIN NEWS JOURNAL**, PAPER OF GENERAL CIRCULATION, PRINTED AND PUBLISHED IN WHITLEY COUNTY , DO SOLEMNLY SWEAR THAT FROM MY OWN PERSONAL KNOWLEDGE, AND REFERENCE TO THE FILES OF SAID PUBLICATION THE ADVERTISEMENT OF THE McCreary Co Public Notice, ATTACHED HERETO WAS INSERTED IN **THE WHITLEY/CORBIN NEWS JOURNAL** ON THE FOLLOWING DATES: 8/14/19.

Trent Knuckles
SIGNATURE

NOTARY PUBLIC

SUBSCRIBED AND SWORN TO ME THIS 27th day of August 2019,
ID # 570287 MY COMMISSION EXPIRES 1-11-21

Joyce Morgan
NOTARY PUBLIC /JOYCE MORGAN

NOTARY SEAL

Apartments For Rent

Investment Opportunity

FOR SALE BY OWNERS!
Three bedroom house AND two 3-bedroom apartments. 600 Pitzer St., Barbourville, KY. Call 423-869-3018 31-4-X

Land for Sale

27.8 ACRES of rural land in Bee Creek/Corbin area. Acreage is level to rolling land with several possible uses. Located on Halcomb Pond Rd. Call 606-528-5130 33-3-X

Help Wanted

LAND SURVEYING FIRM needs Licensed Surveyor, Surveyor Technician, Instrument Operator, Autocad Technician. Mail Resume: P.O. Box 1284, London, Kentucky 40743
32-2-B

Legal Notices

NOTICE OF INTENTION TO MINE

Pursuant to Application Number 918-0435
Major Revision #3

In accordance with KRS 350.070, notice is hereby given that Alden Resources LLC; 332 W. Cumberland Gap Pkwy., Suite 100; Corbin, Kentucky 40701 has applied for a major revision to an existing surface coal mining and reclamation operation located approximately 0.5 miles south west of Hamblin Hollow Road's intersection with Poplar Creek Road, and approximately 2.5 miles north east of the community of Verne, in Whitley County, Kentucky. The major revision will not add any surface disturbance acreage or underground acreage to the permit area.

The proposed major revision is located on the Saxton U.S.G.S. 7½ minute quadrangle map. The operation will use the Contour and Auger methods of mining. The surface area to be affected by the major revision is owned by Adam Hill. The operation will affect an area within 100 feet of Hamblin Hollow road and Randle Cemetery road. The operation will not involve relocation and/or closure of a public road.

The major revision proposes a land use change to Residential from Pastureland.

This is the final advertisement of this application. All comments, objections or requests for a permit conference must be received within thirty (30) days of today's date. The Major Revision application has been filed for public inspection at the Department for Surface Mining Reclamation and Enforcement's Middlesboro Regional Office; 1804 East Cumberland Avenue; Middlesboro, Kentucky 40965-1229. Written comments, objections, or requests for a permit conference must be filed with the Director; Division of Permits; 300 Sower Boulevard, 2nd Floor Frankfort, Kentucky 40601. 30-4-Bx

NOTICE OF BOND RELEASE

In accordance with KRS 350.093, notice is hereby given that Mountainside Coal Co., Inc., 5540 KY 1809, Barbourville, Kentucky 40906 has applied for a Phase 1 Bond Release of Increments 8 of Permit # 918-0467, which was last issued on April 6, 2018. The application covers an area of approximately 20.40 acres of surface disturbance and underlies an additional 13.30 acres of auger area located approximately 1.2 miles north of the intersection Hwy 779 and Hwy 1418 and 3.15 miles northwest of the confluence of Flat Creek and the Cumberland River. The permit area is located near Permon in Knox and Whitley Counties and located on the Barbourville and Rockholds U.S. G. S. 7 1/2 minute quadrangle maps.

The bond now in effect on Increment 8 is a cash bond in the amount of $75,000. Approximately 60% of the original bond amount ($75,000), is included in the application for release.

Reclamation work performed includes: backfilling, grading, fertilizing, seeding and mulching, completed in the spring of 2017.

Written comments, objections or requests for a public or informal conference must be filed with the Director, Division of Field Services, #2 Hudson Hollow, Frankfort, KY 40601, by September 30, 2019.

A public hearing on the application has been scheduled for, at the Department for Surface Mining Reclamation and Enforcement's Middlesboro Regional Office, 1804 East Cumberland Avenue, Middlesboro, KY 40965-1229. The hearing will be cancelled if no request for hearing or informal conference is received by September 30, 2019.
32-4-B

NOTICE:

East Kentucky Power Cooperative, Inc. (EKPC) is proposing a transmission line rebuild project in portions of McCreary and Whitley Counties. The existing McCreary County Jct. – KU Wofford transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County.

The U.S. Department of Agriculture, Rural Utilities Service (RUS) is considering an application from EKPC for financial assistance to construct the proposed project. Actions taken by the agency for the referenced project may be undertakings subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). This act requires federal agencies to consider the effects of its undertakings on important historic properties listed or eligible for listing in the National Register of Historic Places (NHRP).

On behalf of RUS, EKPC is seeking to identify persons who are interested in participating in the process for evaluating the potential effects of this proposed project on historic properties located in the project area that are listed or eligible for listing in the NHRP. If you have a legal or economic relation to properties that will be affected by the proposed project, or if you have a demonstrable interest in the historic built and/or archaeological environment in the project area, you are invited to participate as a consulting party in the Section 106 review process. If you believe you meet these criteria and you wish to participate as a consulting party, please send a letter with your contact information and statement of interest, to Josh Young at josh.young@ekpc.coop, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391.
33-1-B

COMMONWEALTH OF KENTUCKY
34TH JUDICIAL CIRCUIT
WHITLEY CIRCUIT COURT
DIVISION NO. II
CIVIL ACTION NO. 18-CI-00526

JAMES CARL BUNCH, a single man; and his son, JAMES CHARLES BUNCH, a single man, PLAINTIFFS.
VS.
DENNIS BUNCH and his wife, DONNA

See CLASSIFIEDS, page B-5

CITY OF WILLIAMSBURG REQUEST FOR BID

The City of Williamsburg is now accepting bids for road repairs on Mt. Morgan. Separate bids will be needed for the two areas. Each area will require:

1. Railroad rails – drilled
2. Cribbing
3. Excavation
4. #2 Stone
5. DGA Stone

FACILITY ATTENDANT HELP WANTED

The Corbin Tourism Commission is seeking applications for a part-time facility attendant for the Corbin Center. Applicants must be available to work nights and weekends. Competitive wages, experience preferred but not required. Must be 18 & older to apply. Applications available Monday-Friday from 8am-4pm at the Corbin Tourism office located at 222 Corbin Center Dr. 606-528-8860 Corbin Tourism is an EEO employer.

Building & Land For Sale

FOR SALE

Fresh

EAST KENTUCKY POWER COOPERATIVE

June 7, 2019

The Honorable Jimmie W. Green II
McCreary County Judge/Executive
1 North Main Street
Whitley City, KY 42653

RE: Invitation to Participate as a Consulting Party for the Section 106 Review Process for the Proposed McCreary County Juntion - KU Wofford 69 kV Transmission Line Rebuild Project

Dear Judge Green,

Thank you for taking the time to review this letter regarding the potential involvement by your office in the above referenced project. The U.S. Department of Agriculture, Rural Utilities Service (RUS), is considering an application from East Kentucky Power Cooperative (EKPC) for financial assistance for the construction, operation, and maintenance of the McCreary County Junction (Jct.)-Kentucky Utilities (KU) 69 kilovolt (kV) Transmission Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The existing McCreary County Jct. – KU Wofford transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. Enclosed is a topographic map depicting the preliminary project plan.

As head of the local government in the area that will be affected by the project, and in accordance with 36 CFR Part 800 and the National Historic Preservation Act of 1966, as amended, you and/or your representative(s) are entitled to participate in the Section 106 review process as a consulting party. If you desire to become formally involved in the regulatory process as a consulting party, please send an email or letter to *josh.young@ekpc.coop*, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391. We look forward to hearing from you.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

EAST KENTUCKY POWER COOPERATIVE

June 7, 2019

The Honorable Pat White, Jr.
Whitley County Judge/Executive
200 Main Street
Williamsburg, KY 40769

RE: Invitation to Participate as a Consulting Party for the Section 106 Review Process for the Proposed McCreary County Junction - KU Wofford 69 kV Transmission Line Rebuild Project

Dear Judge White,

Thank you for taking the time to review this letter regarding the potential involvement by your office in the above referenced project. The U.S. Department of Agriculture, Rural Utilities Service (RUS), is considering an application from East Kentucky Power Cooperative (EKPC) for financial assistance for the construction, operation, and maintenance of the McCreary County Junction (Jct.)-Kentucky Utilities (KU) Wofford 69 kilovolt (kV) Transmission Line Rebuild Project in portions of McCreary and Whitley Counties, Kentucky. RUS is considering funding this application, thereby making the referenced project an undertaking subject to review under Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800).

The existing McCreary County Jct. – KU Wofford transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. Enclosed is a topographic map depicting the preliminary project plan.

As head of the local government in the area that will be affected by the project, and in accordance with 36 CFR Part 800 and the National Historic Preservation Act of 1966, as amended, you and/or your representative(s) are entitled to participate in the Section 106 review process as a consulting party. If you desire to become formally involved in the regulatory process as a consulting party, please send an email or letter to *josh.young@ekpc.coop*, or at East Kentucky Power Cooperative, 4775 Lexington Road, Winchester, KY 40391. We look forward to hearing from you.

Sincerely,

Josh Young
Supervisor, Natural Resources
& Environmental Communications

Enclosures
cc: Jerry Purvis, Steve Anderson, Darrin Adams (EKPC)
Lauren McGee Rayburn (RUS)

4775 Lexington Road 40391
P.O. Box 707, Winchester
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
http://www.ekpc.coop

ANDY BESHEAR
GOVERNOR

REBECCA W. GOODMAN
SECRETARY

ZEB WEESE
EXECUTIVE DIRECTOR

ENERGY AND ENVIRONMENT CABINET
OFFICE OF KENTUCKY NATURE PRESERVES

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-573-2886
TELEFAX: 502-564-7484

March 4, 2020

Chris Carpenter
East Kentucky Power Cooperative
4775 Lexington Road
Winchester, KY 40391

Project:	McCreary County Junction-KU Wofford 69 kV Transmission Line Rebuild
Project ID:	20-0109
Project Type:	Standard (*customers will be invoiced), 2.5 mile buffer ($250 fee)
Site Acreage:	3,802.06
Site Lat/Lon:	36.740645 / -84.297452
County:	McCreary; Whitley
USGS Quad:	CUMBERLAND FALLS; HOLLYHILL; WHITLEY CITY; WOFFORD
Watershed HUC12:	Lower Jellico Creek; Lower Marsh Creek; Sanders Creek-Cumberland River; Upper Marsh Creek; Watts Creek +

Dear Chris Carpenter,

This letter is in response to your data request for the project referenced above. We have reviewed our Natural Heritage Program Database to determine if any of the endangered, threatened, or special concern plants and animals or exemplary natural communities monitored by the Office of Kentucky Nature Preserves occur within your general project area. Your project does pose a concern at this time, therefore please see the attached reports and report key for more detailed information.

I would like to take this opportunity to remind you of the terms of the data request license, which you agreed upon in order to submit your request. The license agreement states "Data and data products received from the Office of Kentucky Nature Preserves, including any portion thereof, may not be reproduced in any form or by any means without the express written authorization of the Office of Kentucky Nature Preserves." The exact location of plants, animals, and natural communities, if released by the Office of Kentucky Nature Preserves, may not be released in any document or correspondence. These products are provided on a temporary basis for the express project (described above) of the requester, and may not be redistributed, resold or copied without the written permission of the Biological Assessment Branch (300 Sower Blvd - 4th Floor, Frankfort, KY, 40601. Phone: 502-782-7828).

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed and new plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. We would greatly appreciate receiving any pertinent information obtained as a result of on-site surveys.

If you have any questions, or if I can be of further assistance, please do not hesitate to contact me.

Sincerely,

Nour Salam
Geoprocessing Specialist

Standard Occurrence Report
KNP monitored species within 13200 Feet of Project Area

EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
1469	*Agalinis decemloba*	Ten-lobed False Foxglove	G3G4	S1	E			2011-09-13	S	B	36.7347 / -84.3272	KY 679, 0.3 rd miles W of McCreary-Whitley Co line, at jct of two powerlines.	SANDY OR CLAY SOILS. IN KY, ON DRY SANDY RIDGES IN OAK-PINE WOODS.
4505	*Agalinis decemloba*	Ten-lobed False Foxglove	G3G4	S1	E			1999-09-21	S	D	36.7539 / -84.4744	E SIDE OF US 27, CA 1.0 RD MI S OF JCT OF US 27/KY 1651, IN POWERLINE ROW.	SANDY OR CLAY SOILS. IN KY, ON DRY SANDY RIDGES IN OAK-PINE WOODS.
10489	*Agalinis decemloba*	Ten-lobed False Foxglove	G3G4	S1	E			2011-09-12	S	BC	36.7008 / -84.3878	0.2 airmiles N of northern end of urnway of McCreary Co. Airport, On E side of rd.	SANDY OR CLAY SOILS. IN KY, ON DRY SANDY RIDGES IN OAK-PINE WOODS.
373	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-08	S	B	36.7342 / -84.3697	MARSH CR, CA 0.5 STREAM KM DOWNSTREAM FROM LAUREL CR, CA 13.7 KM SE OF WIBORG, KY (SITE 10).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
374	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-09	S	B	36.7342 / -84.3611	MARSH CR, CA 1.0 STREAM KM DOWNSTREAM FROM DUCK RUN, CA 14.3 KM SE OF WIBORG, KY (SITE 11).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
914	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-02	S	C	36.6897 / -84.3439	MARSH CR, AT UNNAMED E TRIB CA 0.7 STREAM KM DOWNSTREAM FROM KY 1044 (SITE 18).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
1484	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-11	S	F	36.7614 / -84.3516	Marsh Creek, ca 3.3 stream km upstream from Hens Nest Creek, ca 12.6 km SE of Wiborg, KY (Site 5).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder

Standard Occurrence Report
KNP monitored species within 13200 Feet of Project Area

EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
													substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
2071	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-12	S	C	36.7061 / -84.3528	MARSH CR, AT THE MOUTH OF BIG BRANCH, CA 16.6 KM SE OF WIBORG, KY (SITE 14).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
2795	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1989-08-15	S	F	36.7439 / -84.3711	Marsh Creek, at Laurel Creek (Liberty) road bridge, 6.1 miles ENE of Whitley City.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
3317	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	2012-06-13	S	E	36.715 / -84.355	Marsh Creek, at Hwy 478 crossing.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
3611	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-11	S	F	36.7625 / -84.3578	Marsh Creek, ca 2.7 stream km upstream from Hens Nest Creek, ca 12.9 km ESE of Wiborg, KY (Site 4).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
4799	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-10	S	F	36.7592 / -84.3519	Marsh Creek, at unnamed E trib ca 3.6 stream km upstream from Hens Nest Creek, ca 12.4 km SE of	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow.

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EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
												Wiborg, KY (Site 6).	Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
5777	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-03	S	C	36.7476 / -84.3736	MARSH CR, AT UNNAMED W TRIB CA 0.5 STREAM KM DOWNSTREAM FROM KY 679, CA 12.4 KM SE OF WIBORG, KY (SITE 8).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
5938	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-17	S	F	36.6952 / -84.3432	Marsh Creek, immediately upstream from unnamed W trib ca 0.5 stream km upstream from Kidd School Road Ford (Site 17).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
6008	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-04	S	F	36.6989 / -84.3453	Marsh Creek, downstream from Kidd School Road Ford (Site 15).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
6203	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1980-07-12	S	H	36.7603 / -84.3603	MARSH CR, ABOUT 2 KM N OF LIBERTY RD, 5 MI ABOVE ITS MOUTH, 6.5 MI ENE OF WHITLEY CITY.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
7609	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-03	S	B	36.7414 / -84.3747	MARSH CR, CA 0.4 STREAM KM	Medium-size, low to moderate gradient, high

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EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
												UPSTREAM FROM KY 679, CA 12.9 KM SE OF WIBORG, KY (SITE 9).	quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
7677	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-11	S	B	36.7131 / -84.3567	MARSH CR, CA 0.3 STREAM KM UPSTREAM FROM KY 478, CA 16.1 KM SE OF WIBORG, KY (SITE 13).	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
8655	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-03	S	C	36.7492 / -84.3692	MARSH CR, AT UNNAMED W TRIB CA 1.0 STREAM KM DOWNSTREAM FROM KY 679.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
9497	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1981-pre	G	H	36.7423 / -84.156	Cumberland River, at Williamsburg.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
10535	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	2003-08-12	S	F	36.6959 / -84.3438	Marsh Creek, ca 0.25 mi upstream from Kidd School Road ford.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca

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EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
11731	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	1994-08-11	S	F	36.7468 / -84.3735	Principal EO: Marsh Creek, from ca 2 km above confluence with Laurel Creek to several km downstream.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
11733	*Alasmidonta atropurpurea*	Cumberland Elktoe	G1G2	S1	E	LE	Y	2003-08-12	S	F	36.6993 / -84.3449	Principal EO: Marsh Creek, McCreary Co: EO ranges over 5 km from KY 478 upstream to KY 1044.	Medium-size, low to moderate gradient, high quality streams usually in areas of near zero flow. Occupies interstital spaces within cobble and or boulder substrate where it is usually partly buried in a sand, gravel, and mud mixture (Harker et al. 1980, Ca
3641	*Amphiagrion saucium*	Eastern Red Damsel	G5	S1S2	E			1969-06-08	M	H	36.7404 / -84.1022	Yaden.	Spring-fed bogs or pond margins, sometimes with a deep peat layer are preferred. Also found where seeps with a scattering of sphagnum and algae run over sand (Westfall and May 1996).
635	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-03	S	C	36.7203 / -84.3597	MARSH CR CA 0.2 STREAM KM DOWNSTREAM FROM TAYLOR BRANCH; CA 15.3 KM SE OF WIBORG (SITE 12).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
1161	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1998-pre	G	X	36.6517 / -84.1263	Clear Fork of Cumberland River.	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
1283	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1987-09	S	F	36.715 / -84.355	Marsh Creek, at KY 478 bridge (3.9 miles NNW of Hollyhill, 6.3 miles E of Whitley City)	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
1983	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-12	S	D	36.7061 / -84.3533	Marsh Creek, at the mouth of Big Branch; ca	Inhabits sand, silt, mud, and small gravel often near

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EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
												16.6 km SE of Wiborg (Site 14).	cobble and boulders in pools and runs with slow current in small to medium-sized streams.
4544	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-11	S	D	36.7131 / -84.3567	MARSH CR CA 0.3 STREAM KM UPSTREAM FROM KY 478; CA 16.1 KM SE OF WIBORG (SITE 13).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
5318	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1989-08-15	S	F	36.7436 / -84.3711	Marsh Creek, at KY 679 bridge.	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
6287	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-17	S	F	36.6952 / -84.3432	Marsh Creek, immediately upstream from unnamed W trib ca 0.5 stream km upstream from Kidd School Road Ford; ca 18.2 km SE of Wiborg (Site 17).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
6794	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-04	S	F	36.6994 / -84.345	Marsh Creek, downstream from Kidd School Road Ford; ca 17.2 KM SE of Wiborg (Site 15).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
7047	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-12	S	B	36.6897 / -84.3439	MARSH CR AT UNNAMED E TRIB CA 0.7 STREAM KM DOWNSTREAM FROM KY 1044; CA 18.5 KM SE OF WIBORG (SITE 18).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
9102	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	1994-08-10	S	F	36.7606 / -84.3519	Marsh Creek, at unnamed E trib ca 3.6 stream km upstream from Hens Nest Cr; ca 12.4 km SE of Wiborg (site 6).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.
10698	*Anodontoides denigrata*	Cumberland Papershell	G1	S1	E	SOMC	Y	2002-07-23	S	F	36.6959 / -84.3438	Marsh Creek, ca 0.3 stream km upstream of Kidd School Road ford; ca 17.9 km SE of Wiborg (site 16).	Inhabits sand, silt, mud, and small gravel often near cobble and boulders in pools and runs with slow current in small to medium-sized streams.

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264	*Appalachian pine-oak forest*		GNR	S5	N			1994-08-03	S	X	36.6998 / -84.3727	Circa 1 air mi NE of McCreary County Airport.	Many stands of this type have been heavily impacted by southern pine beetles in past years, and require intense restoration efforts involving a combination of fire, herbicide and mechanical treatments of hardwoods and possible planting of pine, to restore the pine component. Spread of exotics into these systems is best prevented by avoiding disturbance of the substrate i.e. through trail construction or timber management activities, and restricting visitation to foot travel. Maintaining a large forested buffer also helps to reduce infestations and could increase long-term survival of this stand. Fire and mechanical removal of midstories can be used to manage these stands for a more open pine-oak savanna that is thought to have occurred in parts of the southern cliff section and is associated with several rare species, now primarily restricted to road sides and some powerline corridors, or recently become extinct (i.e. red-cockaded woodpeckers).
13496	*Appalachian seep/bog*		GNR	S1S2	T			2011-10-18	S	B		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Appalachian seeps/bogs, one of the rarest community types in the state, are very sensitive to disturbance. Disturbance, including timber management and trails within the seep and its associated watershed, including the channel downstream of the seep, can cause changes in hydrology, increase sedimentation, change

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													vegetation composition or structure, or promote invasion by exotic species, especially Microstegium viminium. Elk have in recent years damaged some of the few remaining seeps in the region, and may become a threat to this community.
2577	*Bartonia virginica*	Yellow Screwstem	G5	S2	T			1995-10-09	S	D	36.7186 / -84.3908	E of Whitley City, ca 0.4 air mi E of Indian Knob, in power line row.	Bogs, swamps, savannas (Weakley 2011); dry or wet acid soil; in KY, mossy seeps.
8216	*Bartonia virginica*	Yellow Screwstem	G5	S2	T			1990-08-08	M	F	36.7631 / -84.4861	RAVINE OFF US 27, N OF WHITLEY CITY.	Bogs, swamps, savannas (Weakley 2011); dry or wet acid soil; in KY, mossy seeps.
9014	*Calopogon tuberosus var. tuberosus*	Grass-pink	G5T5	S1	E			1941-08-30	M	F		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	
10036	*Calycanthus floridus var. glaucus*	Eastern Sweetshrub	G5T5	S2	T			2011-08-30	S	A	36.7147 / -84.3561	Marsh Cr, W. bank 100-500 ft upstream (S) from 478 bridge.	Rich mountain woods, hillsides, streambanks.
12587	*Cambarus buntingi*	Longclaw Crayfish	G4Q	S2S3	T		Y	2002-04-19	S	C	36.7453 / -84.2659	Jellico Creek, Whitley County: at KY 474 bridge. approx 1.2 km from mouth	Medium to large creeks with clean cobble substrate containing boulders.
12588	*Cambarus buntingi*	Longclaw Crayfish	G4Q	S2S3	T		Y	2002-07-10	S	B	36.7282 / -84.4035	Bridge Fork/Laurel Fork, Whitley County: stream areas above KY 478 bridge, approx 5 aerial mi W of Duckrun	Medium to large creeks with clean cobble substrate containing boulders.
12589	*Cambarus buntingi*	Longclaw Crayfish	G4Q	S2S3	T		Y	2002-07-03	S	CD	36.7888 / -84.24	Sanders Creek, Whitley County: 4.22 km NW of Liberty, at SR 204/SR 1481 junction	Medium to large creeks with clean cobble substrate containing boulders.
12591	*Cambarus buntingi*	Longclaw Crayfish	G4Q	S2S3	T		Y	2002-07-14	S	E	36.7739 / -84.138	Browns Creek, Whitley County: KY 779 bridge, 3.8 km NE of Williamsburg.	Medium to large creeks with clean cobble substrate containing boulders.
66	*Cambarus parvoculus*	Mountain Midget Crayfish	G5	S2	S			1978-03-19	M	H	36.8191 / -84.2193	Youngs Creek, 1 mi W Clio.	Rocky streams (Hobbs 1989) and small headwater creeks, seepages, and springs (Taylor and Schuster, 2004).
4592	*Castanea pumila*	Allegheny Chinkapin	G5	S2	T			1996-05-17	S	D	36.7175 / -84.4619	0.15 MI E OF WHITLEY CITY SUBSTATION (E	Xeric forests and woodlands, generally in fire-

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												OF US 27) IN EKP ROW, ON S-FACING POINT.	maintained habitats (Weakley 2011); dry or moist acid soil (Gleason and Cronquist 1991).
3426	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	2010-07-01	S	C	36.7623 / -84.2871	Archers Creek ca 100m upstream of Cumberland Falls Road crossing, 5.4 km W of KY 204 jct.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
3440	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1984-12-04	S	F	36.7358 / -84.2178	Becks Creek (actually Sugar Betty Hollow) at Forest Service Road 522.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
4721	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1977-05-28	S	H	36.7633 / -84.3028	Cane Cr at Cumberland Falls Rd, 9.5 mi WNW of Williamsburg.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
4914	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1993-04-28	S	D	36.7087 / -84.4286	LAUREL CREEK, FROM UPPER END OF USFS TRAIL NUMBER 620 TO 0.25 MI BELOW UPPER END OF USFS TRAIL NUMBER 620.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
5514	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	2010-06-30	S	C	36.8131 / -84.2203	Youngs Creek at KY Route 204, 6 mi NNW of Williamsburg.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
7141	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1993-08-11	S	C	36.6967 / -84.3553	BIG BRANCH CA 1.3 RIVER KM UPSTREAM FROM MARSH CR CONFLUENCE.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
7294	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1988-04-22	S	F	36.7888 / -84.2399	Sanders Creek at KY 1481, 7.0 mi NW Williamsburg.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
9349	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1993-08-11	S	C	36.7364 / -84.4089	JENNEYS BRANCH CA 1.1 STREAM KM UPSTREAM FROM MOUTH.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
11331	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	2003-08-12	S	AB	36.7810 / -84.3010	Archer Creek site 4 [ca 200 m upstream from the	Small upland streams usually in pools that are well

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												third eastern tributary upstream from the mouth].	shaded by dense riparian vegetation and with cool water (
11777	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	1993-04-28	S	D	36.7094 / -84.4274	Laurel Creek, ca 560 m long stream section from upper end of USFS trail no. 620 to 0.25 miles below upper end of trail 620	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
13843	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	2010-08-13	S	E	36.7777 / -84.1131	Browns Creek, near Wofford, off KY 779 across from Perkins Cemetary	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
13848	*Chrosomus cumberlandensis*	Blackside Dace	G2	S2	T	LT	Y	2007-03-27	S	E	36.7143 / -84.4081	Elisha Branch, 0.34 km above confluence with Laurel Creek of Marsh Creek.	Small upland streams usually in pools that are well shaded by dense riparian vegetation and with cool water (
3965	*Coreopsis pubescens var. pubescens*	Star Tickseed	G5?T4T5	S2S3	S			1989-06-29	S	B	36.751 / -84.3639	MARSH CR, S BANK CA 2.1 (AIR) MI SW OF MOUTH.	
714	*Cryptobranchus alleganiensis alleganiensis*	Eastern Hellbender	G3T2	S2S3	S	SOMC	Y	1990-09-17	S	NR		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Confined to running waters of fairly large streams and rivers, especially in stretches with large flat stones.
5649	*Dryobates borealis*	Red-cockaded Woodpecker	G3	SX	X	LE	Y	1986	S	X	36.7169 / -84.4121	East of Whitley City, ridge above (S of) Laurel Fork, ca 0.25 air mi W of mouth of Elisha Branch and S of powerline right-of-way (012A) and ridges above (N of) Laurel Fork and S of FS 696 (Pigskin Rd), N of powerline right-of-way, ca 0.55 air mi NNW of mo	Appalachian pine-oak forests along sandstone ridgetops. The well developed mid-stories (dominated by maples, sourwood, and dogwood) have been removed by the U.S. Forest Service at all known colonies starting in 1989.
8401	*Dryobates borealis*	Red-cockaded Woodpecker	G3	SX	X	LE	Y	1998-11	S	X	36.7008 / -84.4039	Elisha Branch, at head of unnamed ravine ca 0.6 air mi NW of jct of Indian Knob Rd and Laurel Cemetery Rd.	Appalachian pine-oak forests along sandstone ridgetops. The well developed mid-stories (dominated by maples, sourwood, and dogwood) have been removed by the U.S. Forest Service at all known colonies starting in 1989.
13178	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2009-08-17	S	F	36.6814 /	Marsh Creek, from approx	

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											-84.3462	6.8 stream km above mouth upstream to headwaters over 6 locations	
13180	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1994-09-24	S	B	36.7284 / -84.4037	Bridge Fork at confluence with Laurel Fork, 5.9 km E of Whitley City	
13182	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2007-07-18	S	B	36.7316 / -84.4005	Laurel Creek, McCreary County: from 0.4 stream km above confluence with Jenneys Branch to 5.7 stream km above Jenneys Branch across 5 locations	
13201	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2006-05-24	S	C?	36.7141 / -84.3691	Taylor Branch at SR 478 Bridge	
13203	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1993-08-11	S	E	36.6958 / -84.3561	Big Branch ca 4.4 air km NNW of Hollyhill	
13204	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2007-04-12	S	B	36.7359 / -84.4072	Jennys Branch 1.1 stream km upstream of mouth.	
13215	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2012-08-16	S	E	36.7619 / -84.2874	Archers Creek, at River Road crossing (046A), and ca 0.25 km above confluence with the Cumberland River (046B).	
13224	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2007-07-18	M	E	36.7125 / -84.4728	Bridge Fork	
13225	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2007-07-18	S	D	36.7287 / -84.4051	Bridge Fork; Approximately 0.2 miles NW of the end of FS Road 6154 River Milepost 0.1 (056A); and 100 m above confluence with Laurel Creek near KY 478 bridge River Milepost 1.8 (056B).	
13238	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2010-06-30	S	BC	36.8286 / -84.2208	Youngs Creek, Whitley County: below KY 204 bridge, 6 mi NNW of Williamsburg (063A), ca 350 m downstream of KY 204 bridge (063B), at Brays Chapel Rd. crossing (063C), and at White Town Loop ca 1.1 stream km above mouth on Cumberland River (063D)	

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13357	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1977-07-30	G	F	36.7818 / -84.1031	Browns Creek, Whitley County: off KY 779	
13362	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2000-09-20	S	E	36.7457 / -84.2661	Jellico Creek, McCreary County:	
13390	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1968-08-27	S	H	36.7796 / -84.1382	Watts Creek, Whitley County: 0.3 air mi SW of Wofford.	
13391	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2006-07-26	S	B	36.7606 / -84.2590	White Oak Creek, Whitley Co: just above confluence with Cumberland River	
13395	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1993-08-12	S	H	36.7163 / -84.4083	Elisha Creek, McCreary County: from just above mouth to approx 1.6 km above mouth at 2 locations	
13412	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1994-07-27	S	E	36.7800 / -84.1702	Cumberland River at I-75.	
13413	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	2006-07-27	S	E	36.7581 / -84.3283	Cumberland River, shoal at and below confluence of Buck Shoals Creek	
13414	*Etheostoma sagitta*	Cumberland Arrow Darter	G3	S3	S		Y	1976-07-06	S	H	36.7306 / -84.3505	Duck Run, 0.5 mi N of KY 478.	
1384	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1987-09-10	M	H	36.7253 / -84.1772	BRIER CREEK AT KY 92.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
2393	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1993-04-28	S	C	36.7119 / -84.4258	Laurel Creek 0.25 air mi below upper end of USFS Trail No 620 [ca 0.6 air mi WNW of Gilreath Cemetery].	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
4288	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1988-10-13	S	C	36.7167 / -84.4081	Laurel Creek just upstream of Elisha Br.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
6227	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	2007-04-10	S	C	36.8131 / -84.2203	Youngs Creek at SR-204, 6.5 mi NW Williamsburg.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to

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													moderate gradient.
7093	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1993-04-28	S	D	36.7275 / -84.41	BRIDGE FORK OF LAUREL CREEK, 0.5 MI UPSTREAM OF MOUTH.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7158	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	2007-04-12	S	B	36.7281 / -84.4036	BRIDGE FORK, LAUREL CREEK, DIRECTLY ABOVE MOUTH ON KY 478.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7237	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1979-10-02	S	H	36.7833 / -84.2119	YOUNGS CREEK CA 1.1 STREAM KM ABOVE MOUTH.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7249	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1987-09-10	M	H	36.7715 / -84.2349	Sanders Creek at Forest Service Rt 204 (Cumberland Falls Rd) 4 mi NW Williamsburg.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7281	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1993-08-12	S	B	36.7075 / -84.4089	ELISHA BRANCH OFF INDIAN KNOB RD, CA 1.3 STREAM KM UPSTREAM FROM LAUREL CR CONFLUENCE.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7631	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1988-10-12	S	A	36.7119 / -84.4258	LAUREL CREEK FROM UPPER END OF USFS TRAIL NUMBER 620 TO 0.25 MI BELOW UPPER END OF USFS TRAIL NUMBER 620.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7846	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1987-08-13	S	D	36.6989 / -84.3453	MARSH CR AT FOREST SERVICE RD 6913 (6193).	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
7974	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1993-08-11	S	B	36.7364 / -84.4089	JENNEYS BRANCH CA 1.1 STREAM KM UPSTREAM FROM THE MOUTH; CA 5.5 AIR KM	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder,

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												ENE OF WHITLEY CITY.	or bedrock with low to moderate gradient.
9168	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	1987-08-13	S	F	36.715 / -84.355	Marsh Creek at mouth of Caddell Branch, KY 478 bridge area	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
11818	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	2006-05-23	S	E	36.7182 / -84.4107	Laurel Creek, McCreary County: 0.3 km upstream from Elisha Branch	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
12310	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	2007-03-27	S	E	36.7145 / -84.4088	Elisha Branch, 0.34 km above Laurel Creek confluence.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
12311	*Etheostoma susanae*	Cumberland Darter	G1G2	S1	E	LE	Y	2007-04-12	S	E	36.7357 / -84.4017	Jenny's Branch, 300m above Laurel Creek.	Small to moderate-sized streams in pools, shoals, and backwaters with sand, gravel, and cobble/boulder, or bedrock with low to moderate gradient.
1594	*Hexastylis contracta*	Southern Heartleaf	G3	S1	E	SOMC		2007-04-13	S	D	36.7158 / -84.446	FIRST CROSSING OF EKP UTILITY LINE OVER BRIDGE FORK EAST OF US 27, ON LOWER SLOPE OF SW-FACING POINT (009A) AND ON LOWER SLOPE OF NW-FACING POINT (009B).	Deciduous forests with acidic soil.
10478	*Hexastylis contracta*	Southern Heartleaf	G3	S1	E	SOMC		2007-04-12	S	A	36.7275 / -84.4067	ALONG BRIDGE FORK AT KY 478 BRIDGE AND UPSTREAM FOR CA 300 METERS.	Deciduous forests with acidic soil.
2996	*Lilium philadelphicum var. philadelphicum*	Wood Lily	G5T4T5	S2S3	T			1989-09-08	S	D	36.7283 / -84.32	Duckrun, ca 0.7 mi SSW along KY 478.	
5936	*Lilium philadelphicum var. philadelphicum*	Wood Lily	G5T4T5	S2S3	T			1996-06-15	S	F?	36.7354 / -84.331	N side KY 679, 0.3 rd mi W of McCreary-Whitley Co line, at jct of two powerlines (046A), and N side of KY 679, 0.5 rd mi W of co line (046B).	

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7856	*Lilium philadelphicum var. philadelphicum*	Wood Lily	G5T4T5	S2S3	T			2019-06-20	S	CD	36.7529 / -84.4204	Pond Ridge, along KY 700 ca 0.4 mi (017A), 0.65 mi (017B), and 0.9 mi SSW of 4-H camp (017C).	
13423	*Lilium philadelphicum var. philadelphicum*	Wood Lily	G5T4T5	S2S3	T			2010-06-15	S	E	36.715 / -84.3556	Ca 150 [ft?] SW of KY 4789 crossing over Marsh Creek [also near jct with Caddell Branch], behind pine [probably a pine tree] at range fields.	
3063	*Lobelia nuttallii*	Nuttall's Lobelia	G4G5	S2	T			1936-pre	G	H	36.6511 / -84.4422	Pine Knot.	Damp to dry sandy soil, wet meadows, sandy swamps.
91	*Maianthemum canadense*	Wild Lily-of-the-valley	G5	S2	T			1989-05-02	M	E	36.685 / -84.3467	BANKS OF MARSH CREEK NEAR KY 1044 BRIDGE.	Moist mesophytic woods, mountain and stream terraces, mesic rock faces, and recent clearings.
6660	*Maianthemum canadense*	Wild Lily-of-the-valley	G5	S2	T			2011-09-13	S	BC	36.7433 / -84.3711	Marsh Cr, south of Hwy 679 Brdg, scattered grps along ca. at 200 ft. to 800 ft stretch of the bank, ca 15 -30 ft above water level	Moist mesophytic woods, mountain and stream terraces, mesic rock faces, and recent clearings.
4054	*Malus angustifolia*	Southern Crabapple	G5?	S3S4	N			1989-04-21	S	A	36.7086 / -84.3969	INDIAN KNOB, 0.7 MI S ON GRAVEL RD 10-200 FT E OF INDIAN KNOB RD.	OPEN DRY - MESIC WOODS AND THICKETS.
9043	*Malus angustifolia*	Southern Crabapple	G5?	S3S4	N			1989-04-21	S	B	36.7003 / -84.3975	INDIAN KNOB, 1.3 MI S ALONG OLD ROAD 200-700 FT E OF INDIAN KNOB.	OPEN DRY - MESIC WOODS AND THICKETS.
9944	*Manophylax butleri*	Bottle Cap Caddisfly	G2	S2	S			1998-10	S	E	36.7025 / -84.3839	UNNAMED NE FLOWING DRAINAGE TO TAYLOR BRANCH NEAR HEADWATERS; CA 0.6 AIR KM NE OF E END OF MCCREARY CO AIRPORT RUNWAY.	In Kentucky, it is only known along the Pottsville Escarpment of the Cumberland Plateau from rock walls composed of Pennsylvanian age sandstone of the Lee Formation and the Corbin Member, and at elevations ranging from 244-366 m. In general the walls are
13749	*Myotis septentrionalis*	Northern Long-Eared Bat	G1G2	S1	E	LT		1989-07-17	S	NR		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	In winter, Northern Long-eared bats use caves, mine portals, abandoned tunnels, protected sites along clifflines and similar

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													situations that afford protection from cold. They are easily overlooked as they often wedge themselves back into cracks in the wal
5183	*Nannothemis bella*	Elfin Skimmer	G4G5	S1	E			1970-Pre	C	H	36.7794 / -84.4996	MCCREARY COUNTY.	Bogs, sometimes calcareous fens with some sedge meadows and marl deposits (Dunkle 2000). Adults are often found near the margin of the pond or bog in small pockets of sunshine. Larvae seem to prefer shallow holes near the edge of the water, and have been
2375	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	2001-10-23	S	C	36.7344 / -84.3283	Duck Run, along S side of KY 679, ca 0.8 rd mi W jct w/ KY 478.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
3826	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1991-09-30	S	NR	36.7164 / -84.3741	KY 478 at Laurel Cemetery (014A) and in old logging road on a dry ridge along Laurel Cemetery Rd (014B).	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
4227	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1984-05-12	M	NR	36.7271 / -84.4312	Circa 1.5 mi E Whitley City (006A), KY 478, 2.4 km E of jct w/ US 27 (006B), KY 478, 3.1 km E of jct w/ US 27 (006C), KY 478, 3.7 km E of jct w/ US 27 (006D), and KY 478, 4.5 km ENE of jct w/ US 27 (006E).	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
5028	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1982-07-05	S	NR	36.7206 / -84.4728	South of Whitley City on road behind church S of KY 1651, 0.3 km SW of jct KY 1651 and KY 478.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens

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													type vegetation.
5419	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1982-07-04	M	NR	36.7148 / -84.4306	Pigskin Rd [Apple Tree Rd on county map], 4.2 [rd] km ENE of Stearns (011A), 3.2 [rd] km from US 27 (011B), and 2.9 [rd] km NE of US 27 (011C).	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
7050	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1995-10-23	M	C	36.6835 / -84.4702	Revelo off old US 27.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
9643	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	2001-09-04	S	C	36.729 / -84.3229	South side of KY 478, ca 0.2 rd mi NE of McCreary-Whitley Co line (003A) and along FSR 6191, ca 0.3 air mi N KY 478 (003B).	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
10128	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1989-06-23	S	NR	36.7183 / -84.3806	Wright Branch, 4.2 mi E of KY 478 bridge over Laurel Creek.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
10771	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1997-05-25	S	C	36.7391 / -84.3083	Tin site along powerline on KY 478, 0.5 mi E of KY 679.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
10772	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	2001-09-04	S	C	36.7243 / -84.3429	KY 478, 0.8 mi W of KY 1673.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens

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													type vegetation.
10773	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	2001-05-31	S	C	36.717 / -84.3578	On hillside, KY 478 0.1 mi W of Marsh Creek.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
10779	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1997-06-01	S	C	36.6911 / -84.4535	0.2 mi N of FS 6152 under powerline.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
10780	*Ophisaurus attenuatus longicaudus*	Eastern Slender Glass Lizard	G5T5	S2	T		Y	1993-08-14	M	C	36.7185 / -84.3949	Indian Knob on Whitley City quad, where a woods road crosses powerline corridor.	This terrestrial lizard inhabits grassy fields, brushy areas, open woodlands, and seems to prefer drier, upland sites. Likely occurred in native grasslands, and remains most common in barrens type vegetation.
4171	*Orontium aquaticum*	Golden Club	G5	S2	T			2011-09-13	S	D		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Swamps and shallow water, chiefly on coastal plain; also peaty and stagnant water, streambeds in the piedmont, and bogs and swamps in the mountains (Weakley 1998).
5522	*Orontium aquaticum*	Golden Club	G5	S2	T			1994-08-03	S	F		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Swamps and shallow water, chiefly on coastal plain; also peaty and stagnant water, streambeds in the piedmont, and bogs and swamps in the mountains (Weakley 1998).
6718	*Orontium aquaticum*	Golden Club	G5	S2	T			1988-05-31	S	C		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Swamps and shallow water, chiefly on coastal plain; also peaty and stagnant water, streambeds in the piedmont, and bogs and swamps in the mountains (Weakley 1998).
7300	*Orontium aquaticum*	Golden Club	G5	S2	T			1989-05-02	S	B		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	Swamps and shallow water, chiefly on coastal plain; also peaty and stagnant water, streambeds in the piedmont, and bogs and swamps in the

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													mountains (Weakley 1998).
16488	*Panax quinquefolius*	American Ginseng	G3G4	S3S4	CE			2016	S	D		Sensitive Element - Contact OKNP at naturepreserves@ky.gov	
2521	*Parnassia asarifolia*	Kidneyleaf Grass-of-parnassus	G4	S1	E			2011-10-18	S	D	36.6928 / -84.3781	STREAMHEADS DRAINING TO BIG BRANCH 0.75 MI SE (55, 006A) AND ESE (20, 006B) OF CENTER OF MCCREARY CO AIRPORT RUNWAY.	Streambanks and springy or boggy soil, chiefly in the mountains (Gleason & Cronquist 1991); bogs, wet woods, rocky banks (Fernald 1970).
2746	*Parnassia asarifolia*	Kidneyleaf Grass-of-parnassus	G4	S1	E			1989-09-15	S	X	36.6853 / -84.4003	GILREATH, STREAMHEAD OF CLEAR CK TO N, 0.95 MI ENE OF MEADOW GROVE CHURCH.	Streambanks and springy or boggy soil, chiefly in the mountains (Gleason & Cronquist 1991); bogs, wet woods, rocky banks (Fernald 1970).
2837	*Parnassia asarifolia*	Kidneyleaf Grass-of-parnassus	G4	S1	E			1940-10-12	G	H	36.7269 / -84.465	Whitley City.	Streambanks and springy or boggy soil, chiefly in the mountains (Gleason & Cronquist 1991); bogs, wet woods, rocky banks (Fernald 1970).
6129	*Parnassia asarifolia*	Kidneyleaf Grass-of-parnassus	G4	S1	E			1989-08-08	S	D	36.6789 / -84.4433	STREAMHEAD FEEDING CENTER OF LAUREL CK RESERVOIR CA 0.4 MI NNE OF PINE KNOT JOB CORPS CENTER.	Streambanks and springy or boggy soil, chiefly in the mountains (Gleason & Cronquist 1991); bogs, wet woods, rocky banks (Fernald 1970).
4866	*Phemeranthus teretifolius*	Roundleaf Fameflower	G4	S1	E			1989-09-01	S	D	36.7094 / -84.3961	CA 1.1 AIR MI N OF MCCREARY COUNTY AIRPORT ENTRANCE AND 0.1 AIR MI E OF GRAVEL RD. ALONG RIDGETOP ON NW SIDE OF WRIGHT BRANCH.	Dry shallow soil that is seasonally wet by seepage, often between vegetation and open rock of flat sandstone glades.
2694	*Platanthera cristata*	Yellow-crested Orchid	G5	S1S2	T			1939-07-24	G	H	36.6806 / -84.4422	2.0 MI N OF PINE KNOT.	Dry to moist open soil, thickets, woods, and bogs, moist open ephemeral streamheads, pond margins.
1211	*Plestiodon inexpectatus*	Southeastern Five-lined Skink	G5	S2S3	S		Y	1980-07-23	S	H	36.7605 / -84.4162	Sandhill Rd (KY 700) 10.9 km SW of jct KY 1045 and KY 700.	Open woodlands, edges.
1472	*Plestiodon inexpectatus*	Southeastern Five-lined Skink	G5	S2S3	S		Y	2006-09-04	S	C	36.7256 / -84.3205	Duck Run, FSR 6191, ca 0.3 air mi N of KY 478 along powerline row (026A), and along	Open woodlands, edges.

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												powerline row just S of KY 478, ca 0.8 rd mi W of jct w/ KY 679 (026B).	
10499	*Plestiodon inexpectatus*	Southeastern Five-lined Skink	G5	S2S3	S		Y	2006-09-04	S	C	36.7344 / -84.3283	Duck Run, along S side of KY 679, ca 0.8 rd mi W of jct w/ KY 478.	Open woodlands, edges.
10798	*Plestiodon inexpectatus*	Southeastern Five-lined Skink	G5	S2S3	S		Y	1999-05-04	S	C	36.7391 / -84.3082	KY 478 1.0 mi [plotted 0.5 mi] E of KY 679.	Open woodlands, edges.
2696	*Polygala polygama*	Racemed Milkwort	G5	S2	T			2019-06-19	S	B	36.7562 / -84.4754	IN POWERLINE CORRIDORS, 0.7 MI N OF JCT OF US 27/KY 700 ALONG OLD ROAD IN POWERLINE (015B), 0.6 MI N OF JCT OF US 27/KY 700 ALONG ROAD WHERE IT STARTS UPHILL FROM US 27 (015A), AND 0.4 MI N OF JCT OF US 27/KY 700 E OF US 27 (015C).	Dry sandy pine-oak woods and openings on mountain ridgetops.
4061	*Polygala polygama*	Racemed Milkwort	G5	S2	T			1996-06-06	S	F	36.7076 / -84.4608	JUST E OF US 27, CA 1.0 AIR MI NE OF STEARNS RADIO TOWER (MARGNUM 66), AND 1.1 AIR MI NE OF STEARNS RADIO TOWER (MARGNUM 65).	Dry sandy pine-oak woods and openings on mountain ridgetops.
6632	*Polygala polygama*	Racemed Milkwort	G5	S2	T			1980-06-20	M	H	36.7206 / -84.4919	ALONG UNNAMED DIRT RD ON RIDGE TOP, CA 2 MI S OF NEGRO CREEK AND CA 3 MI E OF BIG SOUTH FORK CUMBERLAND RIVER.	Dry sandy pine-oak woods and openings on mountain ridgetops.
8164	*Polygala polygama*	Racemed Milkwort	G5	S2	T			1989-05-27	S	C	36.7378 / -84.4719	WHITLEY CITY, CA 0.75 MI N ON US 27, E SIDE OF RD.	Dry sandy pine-oak woods and openings on mountain ridgetops.
17214	*Potamogeton tennesseensis*	Tennessee Pondweed	G2G3	S1	E			2019-09-10		BC	36.6993 / -84.3449	From Pine Knot, travel 6.7 miles east on hwy 92, turn north on hwy 1044 and travel 3 miles, then turn north on Kidd School Road and arrive at the site after 1 mile. Site is approximately 2 km north of junction of Marsh Creek and Clear Creek.	
4198	*Rhynchospora recognita*	Globe Beaked-rush	G5?	S3	S			1989-06-26	S	C	36.7283 /	DUCKRUN, CA 0.7 MI	Open wet soils.

Standard Occurrence Report
KNP monitored species within 13200 Feet of Project Area

EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
											-84.32	SSW ALONG KY 478.	
7979	*Riparian forest*		GNR	S5	N			1989-05-24	S	C	36.7089 / -84.2762	Jellico Creek, bottomland areas from ca 1.2 stream mi downstream of KY 92 bridge to ca 6.0 stream mi downstream of KY 92 bridge. (Margnum 34, 364225N, 841635W), (Margnum 35, 344225N, 841610W), (Margnum 36, 364200N, 841600W), (Margnum 37, 364118N, 841632W)	This forest type is particularly susceptible to invasion by exotic species due to its flooding regime, moist soils, natural and anthropogenic disturbance factors, warranting regular monitoring and possible eradication efforts. Spread of exotics into these systems is best prevented by avoiding disturbance of the substrate i.e. through trail construction or timber management activities, and restricting visitation to foot trails.
13992	*Sabatia brachiata*	Narrow-leaf Pink	G5?	S1	E			2019-10-10	S	D?	36.7348 / -84.3269	KY 679, 0.3 rd miles W of McCreary-Whitley Co line, at jct of two powerlines.	Mesic pinelands, sandhills, pine savannas, and pine flatwoods. Only known from a powerline site that is a pine grassland remnant in Kentucky.
13502	*Sandstone prairie*		GNR	S1	E			2011-10-18	S	B	36.6976 / -84.3908	McCreary County Airport, area between runway and rd.	
654	*Sophronanthe pilosa*	Shaggy Hedgehyssop	G5?	S2	T			1941-08-30	M	F	36.7631 / -84.4861	2.5 MI N OF WHITLEY CITY. (PLOTTED 3.0 MI N WHITLEY CITY).	Wet meadows, riverbank seeps, pond margins, pine barrens; also sandy woods, clearings and roadsides (Fernald 1970).
2857	*Sophronanthe pilosa*	Shaggy Hedgehyssop	G5?	S2	T			1994-06-21	S	D	36.6967 / -84.3756	Circa 0.8 air mi E of McCreary Co Airport, ca 300 ft N of USFS 690, ca 1.4 rd mi NE of KY 1044.	Wet meadows, riverbank seeps, pond margins, pine barrens; also sandy woods, clearings and roadsides (Fernald 1970).
398	*Sphenopholis pensylvanica*	Swamp Wedgescale	G4	S1S2	S			1996-05-17	S	D	36.7408 / -84.465	E OF MARSHES SIDING, CA 0.5 AIR MI E OF US 27, CA 0.6 AIR MI N OF CROSSING OF POWERLINE ROW W/ JENNYS BRANCH.	Swamps and wet woods (Gleason & Cronquist 1991).
1886	*Stenanthium gramineum*	Eastern Featherbells	G4G5	S2S3	T			1989-09-08	M	X?	36.7147 / -84.3561	Marsh Creek bottom, upstream from KY 489 Bridge.	Mesic forests on river bluffs and in seeps and ridgetops, ephemeral streambanks, wet boulder-cobble bars and riverbanks.

Standard Occurrence Report
KNP monitored species within 13200 Feet of Project Area

EO ID	Scientific Name	Common Name	GRank	SRank	SPROT	USESA	STWG	Last Obs Date	Precision	EO Rank	Lat / Lon	Directions	Habitat
9688	*Stenanthium gramineum*	Eastern Featherbells	G4G5	S2S3	T			2007-08-08	M	E	36.7598 / -84.4847	Head of Big Crk, N of Whitley City.	Mesic forests on river bluffs and in seeps and ridgetops, ephemeral streambanks, wet boulder-cobble bars and riverbanks.
11345	*Stylurus scudderi*	Zebra Clubtail	G5	S1S2	E			1993-09-23	M	H?	36.7251 / -84.4037	Laurel Creek along KY 478.	Clear forest streams and small rivers with riffles, a slow to rapid current, and a sand/muck bottom (Dunkle 2000).
225	*Symphyotrichum concolor*	Eastern Silvery Aster	G5	S2	T			1940-10-12	G	H	36.6486 / -84.4397	Pine Knot.	Dry sandy open oak-pine woods and barrens, and roadsides.
1641	*Symphyotrichum concolor*	Eastern Silvery Aster	G5	S2	T			1999-09-22	S	C	36.7158 / -84.3547	North of KY 478 ca 200 ft from brdg over Marsh Creek, E bank and 4-8 ft from edge of rock outcrop that forms upper bank of cr.	Dry sandy open oak-pine woods and barrens, and roadsides.
2543	*Symphyotrichum concolor*	Eastern Silvery Aster	G5	S2	T			1999-09-21	S	C	36.7539 / -84.4744	EAST SIDE OF US 27, CA 1.0 RD MI S OF US 27/KY 1651, IN POWERLINE ROW.	Dry sandy open oak-pine woods and barrens, and roadsides.
2752	*Symphyotrichum concolor*	Eastern Silvery Aster	G5	S2	T			1941-08-28	G	H	36.6756 / -84.4736	Red sandstone knob S of Sterns [Stearns].	Dry sandy open oak-pine woods and barrens, and roadsides.
13509	*Symphyotrichum concolor*	Eastern Silvery Aster	G5	S2	T			2011-09-12	S	CD	36.7034 / -84.3858	McCreary Co. Airport; ca 0.2mi (028B) and 0.3 mi (028A) past n end of runway, on edge of woods.	Dry sandy open oak-pine woods and barrens, and roadsides.
2335	*Tephrosia spicata*	Spiked Hoary-pea	G4G5	S1S2	E			1941-09-01	M	H	36.6914 / -84.5117	HIGH RIDGE ABOVE COFFEY BRANCH.	Sandy fields, open woods, and barrens.
7845	*Tephrosia spicata*	Spiked Hoary-pea	G4G5	S1S2	E			1938-Pre	C	H	36.7808 / -84.1159	CUMBERLAND RIVER.	Sandy fields, open woods, and barrens.
2534	*Venustaconcha troostensis*	Cumberland Bean	GNR	S1	E	LE		1961-09-18	G	H?	36.7767 / -84.3467	CUMBERLAND RIVER, WHITLEY-MCCREARY CO LINE. [McCreary County]	

Critical Habitats within 13200 Feet of Project Area

Critical Habitat Name	Unit Name	Subunit Name	Federal Register
	Marsh Creek		69FR53136

Critical Habitats within 13200 Feet of Project Area

Critical Habitat Name	Unit Name	Subunit Name	Federal Register
	Unit 03		77FR63604
	Unit 09		77FR63604
	Unit 10		77FR63604
	Unit 11		77FR63604

Managed Areas within 13200 Feet of Project Area

MA ID	Managed Area Name	Unit Type	Owner Name	Managing Institution
99	*Archers Creek Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
15	*Big Branch Outstanding Resource Water*	Outstanding State Resource Water	Private Individual	Kentucky Division of Water
404	*Cumberland River Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
272	*Cumberland River Wild River*	Wild River	Kentucky Department of Parks & U.S. Forest Service & Private individual	Office of Kentucky Nature Preserves
9	*Daniel Boone National Forest*	National Forest	U.S. Forest Service	U.S. Forest Service
42	*Indian Creek Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
222	*Jenneys Branch Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
240	*Laurel Creek of Marsh Creek Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
500	*Marsh Creek (Confluence to RM 24) Outstanding Resource Water*	Outstanding National Resource Water	Kentucky Division of Water	Kentucky Division of Water
183	*Sanders Creek Outstanding Resource Water*	Outstanding State Resource Water	Multiple	Kentucky Division of Water
466	*Youngs Creek Outstanding Resource Water*	Outstanding State Resource Water	Private Individual	Kentucky Division of Water

Wild Rivers within 13200 Feet of Project Area

Wild River Name	Future Field
Cumberland River Wild River	

Areas of Significant Biodiversity within 13200 Feet of Project Area

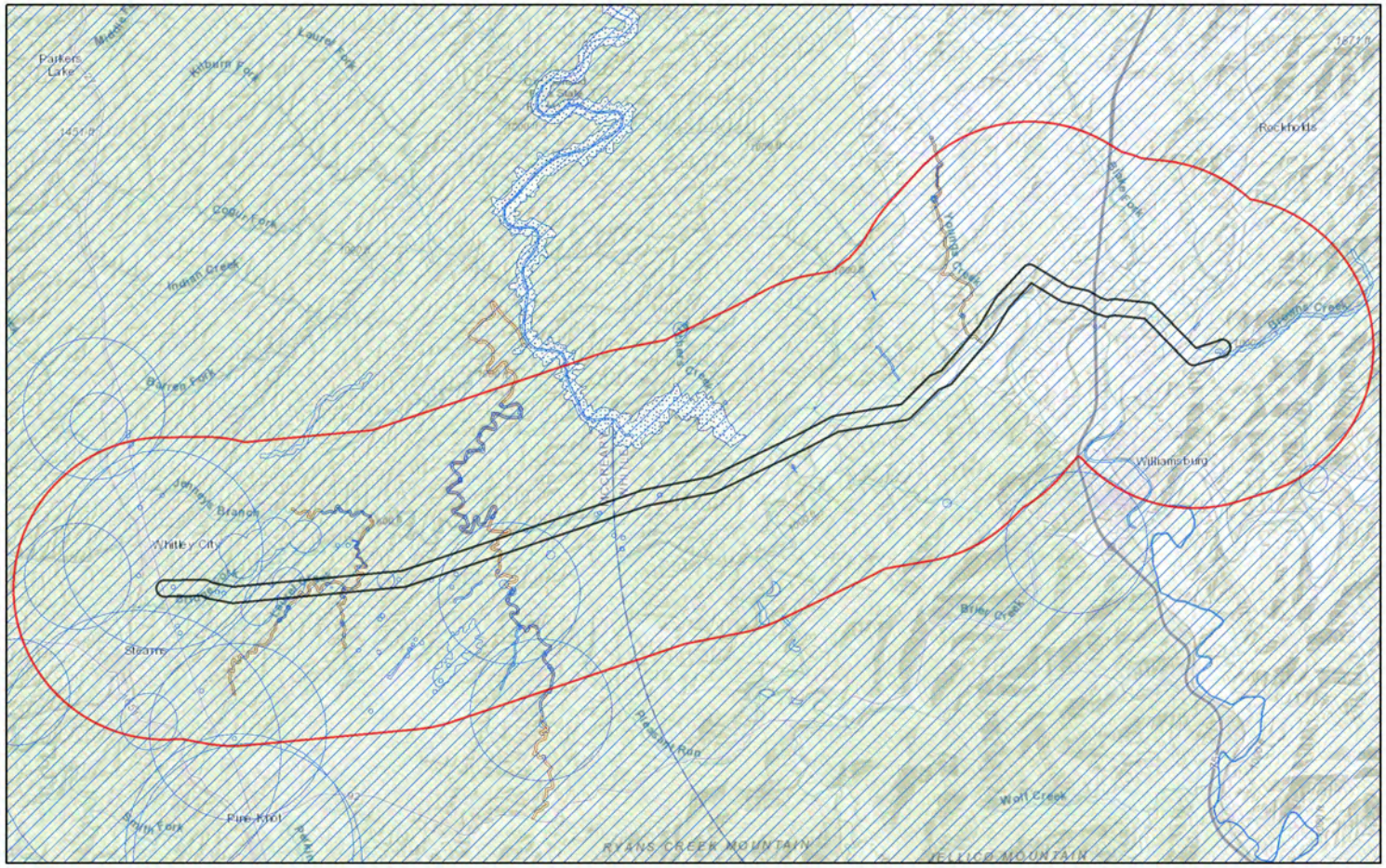
Site ID	Site Name
206	*Archers Creek*
246	*Cumberland River Macrosite*
438	*Duck Run Streamhead*
135	*Gilreath Pine Barrens*
174	*Jellico Creek*
223	*KY 700 Roadsides*
447	*Laurel Creek Watershed Macrosite*
379	*Marsh Creek Corridor Macrosite*
61	*Youngs Creek Macrosite*

Bat Habitats within 13200 Feet of Project Area

Habitat	Species	USFWS
SUMMER 1	*M. septentrionalis*	*Contact USFWS at (502) 695-0468 or KentuckyES@fws.gov*

THESE DATA ARE VALID ONLY ON THE DATE ON WHICH THE REPORT WAS GENERATED.
THESE DATA MAY ONLY BE USED FOR THE PROJECT NAMED ABOVE.

McCreary County Junction-KU Wofford 69 kV Transmission Line Rebuild



March 4, 2020

- Project Boundary
- Buffered Project Boundary
- Element Occurences
- USFWS Critical Habitats
- Wild River Corridors

1:152,257

0 1.25 2.5 5 mi

0 2 4 8 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Phone: (502) 695-0468 Fax: (502) 695-1024
http://www.fws.gov/frankfort/

In Reply Refer To: May 24, 2019
Consultation Code: 04EK1000-2019-SLI-1042
Event Code: 04EK1000-2019-E-02894
Project Name: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Your concern for the protection of endangered and threatened species is greatly appreciated. The purpose of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA) is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. The species list attached to this letter fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the ESA to provide information as to whether any proposed or listed species may be present in the area of a proposed action. This is not a concurrence letter; additional consultation with the Service may be required.

The Information in Your Species List:

The enclosed species list identifies federal trust species and critical habitat that may occur within the boundary that you entered into IPaC. For your species list to most accurately represent the species that may potentially be affected by the proposed project, the boundary that you input into IPaC should represent the entire "action area" of the proposed project by considering all the potential "effects of the action," including potential direct, indirect, and cumulative effects, to federally-listed species or their critical habitat as defined in 50 CFR 402.02. This includes effects of any "interrelated actions" that are part of a larger action and depend on the larger action for their justification and "interdependent actions" that have no independent utility apart from the action under consideration (e.g.; utilities, access roads, etc.) and future actions that are reasonably certain to occur as a result of the proposed project (e.g.; development in response to a new road). If your project is likely to have significant indirect effects that extend well beyond the project footprint (e.g., long-term impacts to water quality), we highly recommend that you

coordinate with the Service early to appropriately define your action area and ensure that you are evaluating all the species that could potentially be affected.

We must advise you that our database is a compilation of collection records made available by various individuals and resource agencies available to the Service and may not be all-inclusive. This information is seldom based on comprehensive surveys of all potential habitats and, thus, does not necessarily provide conclusive evidence that species are present or absent at a specific locality. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please note that “critical habitat” refers to specific areas identified as essential for the conservation of a species that have been designated by regulation. Critical habitat usually does not include all the habitat that the species is known to occupy or all the habitat that may be important to the species. Thus, even if your project area does not include critical habitat, the species on the list may still be present.

Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and associated information. To re-access your project in IPaC, go to the IPaC web site (https://ecos.fws.gov/ipac/), select “Need an updated species list?”, and enter the consultation code on this letter.

ESA Obligations for Federal Projects:

Under sections 7(a)(1) and 7(a)(2) of the ESA and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

If a Federal project (a project authorized, funded, or carried out by a federal agency) may affect federally-listed species or critical habitat, the Federal agency is required to consult with the Service under section 7 of the ESA, pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). Recommended contents of a Biological Assessment are described at 50 CFR 402.12. For projects other than major construction activities, the Service suggests that a biological evaluation

similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat.

ESA Obligations for Non-federal Projects:

Proposed projects that do not have a federal nexus (non-federal projects) are not subject to the obligation to consult under section 7 of the ESA. However, section 9 of the ESA prohibits certain activities that directly or indirectly affect federally-listed species. These prohibitions apply to all individuals subject to the jurisdiction of the United States. Non-federal project proponents can request technical assistance from the Service regarding recommendations on how to avoid and/or minimize impacts to listed species. The project proponent can choose to implement avoidance, minimization, and mitigation measures in a proposed project design to avoid ESA violations.

Additional Species-specific Information:

In addition to the species list, IPaC also provides general species-specific technical assistance that may be helpful when designing a project and evaluating potential impacts to species. To access this information from the IPaC site (https://ecos.fws.gov/ipac/), click on the text “My Projects” on the left of the black bar at the top of the screen (you will need to be logged into your account to do this). Click on the project name in the list of projects; then, click on the “Project Home” button that appears. Next, click on the “See Resources” button under the “Resources” heading. A list of species will appear on the screen. Directly above this list, on the right side, is a link that will take you to pdfs of the “Species Guidelines” available for species in your list. Alternatively, these documents and a link to the “ECOS species profile” can be accessed by clicking on an individual species in the online resource list.

Next Steps:

Requests for additional technical assistance or consultation from the Kentucky Field Office should be submitted following guidance on the following page http://www.fws.gov/frankfort/PreDevelopment.html and the document retrieved by clicking the “outline” link at that page. When submitting correspondence about your project to our office, please include the Consultation Tracking Number in the header of this letter. (There is no need to provide us with a copy of the IPaC-generated letter and species list.)

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Kentucky Ecological Services Field Office
J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670
(502) 695-0468

Project Summary

Consultation Code: 04EK1000-2019-SLI-1042

Event Code: 04EK1000-2019-E-02894

Project Name: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project

Project Type: TRANSMISSION LINE

Project Description: The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres.

Based on the preliminary engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. Roughly 16.6-miles of access roads would be improved or constructed for the construction and maintenance of the transmission line, which would be approximately 15 feet in width. These access roads would cross approximately 5.6-miles of private land, involving approximately 11.7-acres, and approximately 11.0-miles of NFS land, involving approximately 20.0 acres.

EKPC is proposing the McCreary County Jct. – KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing

conductor (3/0 ASCR) with a larger size conductor (795 ACSR-TW) currently utilized by EKPC. EKPC first evaluated reconductoring the line section; however, it was concluded that the existing support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor. Therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/36.75465756994889N84.25677149113265W

Counties: McCreary, KY | Whitley, KY

Endangered Species Act Species

There is a total of 16 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 2 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Gray Bat *Myotis grisescens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location is outside the critical habitat. This species only needs to be considered under the following conditions: ▪ All activities in this location should consider possible effects to this species. The project area includes "potential" habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ The specified area includes areas in which incidental take would not be prohibited under the 4(d) rule. For reporting purposes, please use the "streamlined consultation form," linked to in the "general project design guidelines" for the species. Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened
Virginia Big-eared Bat *Corynorhinus (=Plecotus) townsendii virginianus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8369	Endangered

Fishes

NAME	STATUS
Blackside Dace *Phoxinus cumberlandensis*	Threatened
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/4775	
General project design guidelines:	
https://ecos.fws.gov/ipac/guideline/design/population/295/office/42431.pdf	
Cumberland Darter *Etheostoma susanae*	Endangered
There is **final** critical habitat for this species. Your location overlaps the critical habitat.	
Species profile: https://ecos.fws.gov/ecp/species/1011	
General project design guidelines:	
https://ecos.fws.gov/ipac/guideline/design/population/5719/office/42431.pdf	

Clams

NAME	STATUS
Cumberland Bean (pearlymussel) *Villosa trabalis* Population: Wherever found; Except where listed as Experimental Populations No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6061 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/317/office/42431.pdf	Endangered
Cumberland Elktoe *Alasmidonta atropurpurea* There is **final** critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1248	Endangered
Cumberlandian Combshell *Epioblasma brevidens* Population: Wherever found; Except where listed as Experimental Populations There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3119 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/353/office/42431.pdf	Endangered
Fluted Kidneyshell *Ptychobranchus subtentum* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1397 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/1559/office/42431.pdf	Endangered
Littlewing Pearlymussel *Pegias fabula* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2572 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/335/office/42431.pdf	Endangered
Tan Riffleshell *Epioblasma florentina walkeri (=E. walkeri)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1247 General project design guidelines: https://ecos.fws.gov/ipac/guideline/design/population/346/office/42431.pdf	Endangered

Flowering Plants

NAME	STATUS
Cumberland Rosemary *Conradina verticillata* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3677	Threatened
Cumberland Sandwort *Arenaria cumberlandensis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2514	Endangered
Virginia Spiraea *Spiraea virginiana* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1728	Threatened
White Fringeless Orchid *Platanthera integrilabia* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1889	Threatened

Critical habitats

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Cumberland Darter *Etheostoma susanae* https://ecos.fws.gov/ecp/species/1011#crithab	Final
Cumberland Elktoe *Alasmidonta atropurpurea* https://ecos.fws.gov/ecp/species/1248#crithab	Final

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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Phone: (502) 695-0468 Fax: (502) 695-1024
http://www.fws.gov/frankfort/

In Reply Refer To: May 24, 2019
Consultation Code: 04EK1000-2019-TA-1042
Event Code: 04EK1000-2019-E-02895
Project Name: McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project

Subject: Verification letter for the 'McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project' project under the January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Chris Carpenter:

The U.S. Fish and Wildlife Service (Service) received on May 24, 2019 your effects determination for the 'McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take"[1] prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) only for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Blackside Dace, *Phoxinus cumberlandensis* (Threatened)
- Cumberland Bean (pearlymussel), *Villosa trabalis* (Endangered)
- Cumberland Darter, *Etheostoma susanae* (Endangered)
- Cumberland Elktoe, *Alasmidonta atropurpurea* (Endangered)
- Cumberland Rosemary, *Conradina verticillata* (Threatened)
- Cumberland Sandwort, *Arenaria cumberlandensis* (Endangered)
- Cumberlandian Combshell, *Epioblasma brevidens* (Endangered)
- Fluted Kidneyshell, *Ptychobranchus subtentum* (Endangered)
- Gray Bat, *Myotis grisescens* (Endangered)
- Indiana Bat, *Myotis sodalis* (Endangered)
- Littlewing Pearlymussel, *Pegias fabula* (Endangered)
- Tan Riffleshell, *Epioblasma florentina walkeri (=E. walkeri)* (Endangered)
- Virginia Big-eared Bat, *Corynorhinus (=Plecotus) townsendii virginianus* (Endangered)
- Virginia Spiraea, *Spiraea virginiana* (Threatened)
- White Fringeless Orchid, *Platanthera integrilabia* (Threatened)

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

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[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project

2. Description

The following description was provided for the project 'McCreary County Jct. – KU Wofford 69 kV Transmission Line Rebuild Project':

> The existing transmission line section that would be rebuilt is approximately 20.7 miles in length and generally oriented east to west, roughly paralleling KY Hwy 478 between the existing EKPC Whitley City and KU Wofford 69 kV distribution substations. The McCreary County Jct. (Whitley City substation) is located on the east side of US Hwy 27, 0.4-mile south of KY Hwy 478 (Williamsburg Road) in McCreary County. The KU Wofford substation is located on the north side of KY Hwy 779 (Browns Creek Road), 0.4-mile west of KY Hwy 26 in Whitley County. The route of the existing transmission line to be rebuilt crosses approximately 12.1-miles of private land, encompassing approximately 146.7-acres, and approximately 8.6-miles of National Forest System lands associated with the Stearns Ranger District of the Daniel Boone National Forest, encompassing approximately 104.2-acres.
>
> Based on the preliminary engineering design, 151 steel-pole structures with an approximate above ground height of 72 feet and a typical span length of 750 feet would be used to construct the new line. This would replace the existing 200 wood-pole structures that have an approximate above ground height of 60 feet and a typical span length of 550 feet. Access for the construction of the proposed transmission line would maximize the use of existing public and private roads in the project area, existing USFS roads, and existing EKPC maintenance access roads, but would require the improvement/construction of some access roads. Roughly 16.6-miles of access roads would be improved or constructed for the construction and maintenance of the transmission line, which would be approximately 15 feet in width. These access roads would cross approximately 5.6-miles of private land, involving approximately 11.7-acres, and approximately 11.0-miles of NFS land, involving approximately 20.0 acres.
>
> EKPC is proposing the McCreary County Jct. – KU Wofford transmission line rebuild project to address the poor physical condition of the existing transmission line, including the conductors, static wires, poles, and/or structures. The project would require replacement of the existing conductor (3/0 ASCR) with a larger size conductor (795 ACSR-TW) currently utilized by EKPC. EKPC first evaluated reconductoring the line section; however, it was concluded that the existing

support structures, many of which are the original wood pole structures installed circa 1952, are in poor condition and would not be able to support the larger conductor. Therefore, EKPC is proposing a complete rebuild of this line section using the larger conductor and steel-pole structures.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/36.75465756994889N84.25677149113265W

Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may affect species proposed for listing or critical habitat proposed for designation may require a conference under ESA Section 7(a)(4).

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   Yes

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

   No

3. Will your activity purposefully **Take** northern long-eared bats?

   No

4. Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

5. Is the project action area located within 0.25 miles of a known northern long-eared bat hibernaculum?

   Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

   Automatically answered
   No

6. Is the project action area located within 150 feet of a known occupied northern long-eared bat maternity roost tree?

   Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency

   Automatically answered
   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:
73.7

2. If known, estimated acres of forest conversion from April 1 to October 31
73.7

3. If known, estimated acres of forest conversion from June 1 to July 31
0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest
0

5. If known, estimated acres of timber harvest from April 1 to October 31
0

6. If known, estimated acres of timber harvest from June 1 to July 31
0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire
0

8. If known, estimated acres of prescribed fire from April 1 to October 31
0

9. If known, estimated acres of prescribed fire from June 1 to July 31
0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?
0

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

December 16, 2019

Mr. Josh Young
East Kentucky Power Cooperative
P.O. Box 707
Winchester, KY 40392-0707

Re: FWS 2020-B-0081; East Kentucky Power Cooperative; McCreary Co. Jct. – KU Wofford 69 kV Transmission Line Rebuild Project; McCreary and Whitley Counties, Kentucky

Dear Mr. Young:

The U.S. Fish and Wildlife Service (Service) has reviewed your correspondence, dated November 27, 2019, and attached bat survey report, prepared by Redwing Ecological Services, Inc. (Redwing) regarding this proposed project. East Kentucky Power Cooperative proposes to rebuild, operate, and maintain a portion of the McCreary Co. Jct. – KU Wofford 69 kV Transmission Line. The project includes clearing approximately 73.7 acres of forested habitat to create access roads and to remove trees that would threaten the transmission line. The Service offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.).

According to the report attached to your correspondence, qualified biologists from Redwing and EKPC conducted a mist net survey of the proposed project area on days from June 10 to August 7, 2019. Nets at 20 sites were monitored for two nights each to total 40 net nights. The survey was conducted in accordance to the Service's "2019 Range-Wide Indiana Bat Summer Survey Guidelines." Forty-five bats representing six species were captured during the survey: big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasionycteris noctivagans*), eastern red bat (*Lasiurus borealis*), little brown bat (*Myotis lucifugus*), evening bat (*Nycticeius humeralis*), and tri-colored bat (*Perimyotis subflavus*). No Indiana bats (*Myotis sodalis*) or northern long-eared bats (*Myotis septentrionalis*) were captured.

Indiana bat

Based on the result from the bat survey, we believe that Indiana bats do not likely use habitat in the proposed project corridor during the summer. The results of the survey are valid until May 14, 2024. If the proposed project is not completed by that time, we recommend coordinating with the Service to ensure ESA compliance.

Northern long-eared bat

The first kilometer section of the proposed project corridor, at the terminus near Whitley City, is in known "summer 1" northern long-eared bat habitat. The remainder of the proposed project corridor is not in known northern long-eared bat habitat, and, based on the survey results, the species is not likely using these areas during the summer. Based on the information available to us, this project may affect the northern long-eared bat, but with no effects beyond those previously evaluated in the Service's programmatic biological opinion for the northern long-eared bat final 4(d) rule dated January 5, 2016 (FWS Log# 03E00000-2016-F-0001). Any taking that may occur incidental to this project would not be prohibited under the final 4(d) rule (50 CFR §17.40(o)). Therefore, you may fulfill your responsibilities under ESA section 7(a)(2) relative to the northern long-eared bat for this project by requesting reliance on the Service's programmatic biological opinion for the 4(d) rule. To request reliance on the programmatic biological opinion, Federal Action Agencies may follow the procedures at the Service's Information for Planning and Consultation (IPaC) website, https://ecos.fws.gov/ipac/.

Thank you for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Jessica Blackwood Miller at (502) 695-0468 extension 104 or jessica_miller@fws.gov.

Sincerely,

for Virgil Lee Andrews, Jr.
Field Supervisor

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Kentucky Ecological Services Field Office
330 West Broadway, Suite 265
Frankfort, Kentucky 40601
(502) 695-0468

August 21, 2020

Mr. Josh Young
East Kentucky Power Cooperative
P.O. Box 707
Winchester, KY 40392-0707

Re: FWS 2020-B-0081; East Kentucky Power Cooperative; McCreary Co. Jct. – KU Wofford 69 kV Transmission Line Rebuild Project; McCreary and Whitley Counties, Kentucky

Dear Mr. Young:

The U.S. Fish and Wildlife Service (Service) has reviewed the Biological Assessment and Evaluation (BAE) regarding this proposed project attached to your August 10, 2020 email. East Kentucky Power Cooperative (EKPC) proposes to request funding from the U.S. Department of Agriculture Rural Utilities Service to rebuild, operate, and maintain a portion of the McCreary Co. Jct. – KU Wofford 69 kV transmission Line. Parts of the proposed project area are on U.S. Forest Service Land. The Service offers the following comments in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.).

Indiana bat (*Myotis sodalis*)
During assessments of the proposed project area, no potential hibernacula or roosting habitat for this species was encountered. According to the bat survey report you provided to us on November 27, 2019, qualified biologists from Redwing and EKPC conducted a mist net survey of the proposed project area on days from June 10 to August 7, 2019. Nets at 20 sites were monitored for two nights each to total 40 net nights. The survey was conducted in accordance to the Service's "2019 Range-Wide Indiana Bat Summer Survey Guidelines." Forty-five bats representing six species were captured during the survey: big brown bat (*Eptesicus fuscus*), silver-haired bat (*Lasionycteris noctivagans*), eastern red bat (*Lasiurus borealis*), little brown bat (*Myotis lucifugus*), evening bat (*Nycticeius humeralis*), and tri-colored bat (*Perimyotis subflavus*). No Indiana bats were captured. Based on the result from the bat survey, we believe that Indiana bats do not likely use habitat in the proposed project corridor during the summer. The results of the survey are valid until May 14, 2024. If the proposed project is not completed by that time, we recommend coordinating with the Service to ensure ESA compliance.

Northern long-eared bat (*Myotis septentrionalis*)
You have already obtained verification relative to the northern long-eared bat (*Myotis septentrionalis*) for this project by requesting reliance on the Service's programmatic biological

opinion for the 4(d) rule through the Service's Information for Planning and Consultation (IPaC) system (Event Code: 04EK1000-2020-E-02895).

Gray bat (*Myotis grisescens*)
During assessments of the proposed project area, no potential hibernacula or roosting habitat for this species was encountered. The streams on site may provide potential foraging habitat for the gray bat. Because of the lack of direct impacts, the temporary nature of the impacts during construction, and the use of BMPs to limit sedimentation into streams, we believe that any impacts to gray bat foraging habitat and resources would be insignificant. Based on this information, the Service would concur with a "may affect - not likely to adversely" affect determination for the gray bat.

Virginia big-eared bat (*Corynorhinus townsendii virginianus*)
During assessments of the proposed project area, no potential hibernacula or roosting habitat for this species was encountered. No mechanized equipment or timber harvest will occur within a 100-foot buffer above clifflines or a 200-foot buffer below clifflines. Based on the information available to us, we would concur with a "may affect – not likely to adversely affect" determination for the Virginia big-eared bat.

Blackside dace (*Chrosomus cumberlandensis*)
Cumberland darter (*Etheostoma susanae*)
Cumberland elktoe (*Alasmidonta atropurpurea*)
These three species could potentially occur in streams in the proposed project area. Additionally, three streams, Marsh Creek, Laurel Creek, and Youngs Creek, have been designated critical habitat for the Cumberland darter. The proposed project would not involve direct disturbance to streams. Because of the relatively small scale of the permanent impacts, the temporary nature of the impacts during construction, and the use of BMPs to limit impacts to downstream resources, we believe that any impacts to these aquatic species as a result of sedimentation from upland disturbance would be insignificant. Based on this information, the Service concurs with your "may affect - not likely to adversely" affect determination for the blackside dace, Cumberland darter, and Cumberland elktoe. Additionally, because the rebuilt transmission lines will cross Marsh, Laurel, and Youngs Creek at existing transmission line crossings, the proposed project would not directly disturb these streams or areas within 100 feet of the streams, and EKPC will implement BMPs to minimize sedimentation for upland disturbances, the Service would concur with a "may affect – not likely to adversely affect" determination for Cumberland darter critical habitat.

White fringeless orchid (*Platanthera integrilabia*)
The project areas was assessed and several areas were identified as potentially suitable habitat for this species. No white fringeless orchids were found during surveys of these areas. Additionally, the existing transmission line right-of-way was surveyed in the mid-1990s, and the species was not encountered. Based on the likely absence of the species in the project area, we would concur with a "may affect – not likely to adversely affect" determination for the white fringeless orchid.

You concluded that the proposed project area does not include habitat for the following species: duskytail darter (*Etheostoma percnurum*), palezone shiner (*Notropis albizonatus*), Kentucky arrow darter (*Etheostoma sagitta spilotum*), fanshell (*Cyprogenia stegaria*), Cumberlandian combshell (*Epioblasma brevidens*), oyster mussel (*Epioblasma capsaeformis*), tan riffleshell (*Epioblasma* (= *florentina*) *walkeri*), northern riffleshell (*Epioblasma torulosa rangiana*), snuffbox (*Epioblasma triquetra*), pink mucket (*Lampsilis abrupta*), littlewing pearlymussel (*Pegias fabula*), sheepnose (*Plethobasus cyphyus*), fluted kidneyshell (*Ptychobranchus subtentus* (=*subtentum*)), rabbitsfoot (*Theliderma* (= *Quadrula*) *cylindrica*), Cumberland bean (*Villosa trabilis*), Cumberland sandwort (*Arenaria cumberlandensis*), Virginia spiraea (*Spiraea virginiana*), and running buffalo clover (*Trifolium stoloniferum*). There is no statutory requirement for a Federal Action Agency to request concurrence with a "no effect" determination. We acknowledge these conclusions and have no additional comments or concerns regarding these species.

Based on the information available to us, we believe that the requirements of section 7 of the Endangered Species Act have been fulfilled for this project. Your obligations under section 7 must be reconsidered if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated.

Thank you for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact Jessica Blackwood Miller at (502) 695-0468 extension 46104 or jessica_miller@fws.gov.

Sincerely,

for Virgil Lee Andrews, Jr.
Field Supervisor

Josh Young

From: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Sent: Friday, April 12, 2019 12:52 PM
To: Ronnie Terrill
Subject: RE: McCreary Co - KU Wofford Project

No permits are required from the KAZC. Thank you

Kentucky Airport Zoning Commission (KAZC)
John Houlihan, Administrator
Department of Highways, District Six
421 Buttermilk Pike
Covington, KY 41017
Office 859-341-2700, Office 1-800-928-2700, Desk 859-341-2707 Ext. 277, Cell 502-330-3955

KAZC webpage: https://transportation.ky.gov/Aviation/Pages/airportzoning.aspx

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From: Ronnie Terrill <ronnie.terrill@ekpc.coop>
Sent: Friday, April 12, 2019 6:52 AM
To: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Subject: McCreary Co - KU Wofford Project

John,

Please see the attached KMZ and Excel file for the proposed structures that are within 10,000’ of the McCreary County Airport.

I don’t think we need any type of permit for any of these structures.

Would you please verify and let me know.

Thank you.

Ronnie Terrill
East Kentucky Power Cooperative
859-745-9594 office
859-582-5376 mobile

Josh Young

From: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Sent: Friday, April 12, 2019 12:49 PM
To: Ronnie Terrill
Subject: RE: McCreary Co Jct - KU Wofford Project - Williamsburg Airport

No permits are required from the KAZC. Thank you

Kentucky Airport Zoning Commission (KAZC)
John Houlihan, Administrator
Department of Highways, District Six
421 Buttermilk Pike
Covington, KY 41017
Office 859-341-2700, Office 1-800-928-2700, Desk 859-341-2707 Ext. 277, Cell 502-330-3955

KAZC webpage: https://transportation.ky.gov/Aviation/Pages/airportzoning.aspx

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From: Ronnie Terrill <ronnie.terrill@ekpc.coop>
Sent: Friday, April 12, 2019 8:49 AM
To: Houlihan, John F (KYTC) <John.Houlihan@ky.gov>
Subject: McCreary Co Jct - KU Wofford Project - Williamsburg Airport

John,

Please see the attached KMZ and Excel file for the proposed structures that are within 20,000’ of the Williamsburg-Whitley Co Airport.

None of these structures protrude up into the 100:1 surface, but several are probably in the approach and transitional surfaces.

Can you take a look at these a provide some guidance on what I need to do next, if anything?

Please give me a call if you have any questions.

Thank you.

Ronnie Terrill
East Kentucky Power Cooperative
859-745-9594 office
859-582-5376 mobile