# Biological Assessment

## For

## Salem Bulk to Valley View 69kV Line

Citizens Electric Corporation
A Touchstone Energy® Cooperative

USDA Rural Development

Committed to the future of rural communities.

**Dated: March 2025**

**Prepared By**


TOTH & ASSOCIATES

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# 1 INTRODUCTION

## 1.1 PURPOSE OF THE BIOLOGICAL ASSESSMENT

The Purpose of this Biological Assessment is to assess the potential effects that the construction of the proposed 69 kV transmission line may have on threatened and endangered species that have been identified by the USFWS as possibly existing in the vicinity of the proposed action.

## 1.2 BACKGROUND AND CONTEXT

Citizen's Electric Corporation (CEC) owns and operates an electric transmission and distribution system that serves all of Ste. Genevieve County and Perry County as well as parts of St. Francois and Cape Girardeau Counties in Missouri. CEC serves over 27,000 customers with approximately 3,000 miles of overhead and underground electric distribution lines. CEC is proposing to construct a new, approximately 21.3-mile 69 kV transmission line to improve energy reliability for local communities in Southeast Missouri. The new line will connect the Salem Bulk Substation north of Farmington, MO to the Valley View Substation north of Bloomsdale, MO.

Toth and Associates is an engineering consulting firm based out of Springfield, Missouri that is working on behalf of CEC to complete environmental permitting for this proposed action. The USDA – Rural Development – Rural Utilities Service (RUS) is the lead action agency for this project. RUS's action is the decision to provide financing assistance for the proposed action through the Electric Infrastructure Loan & Loan Guarantee Program. Under the Rural Electrification Act of 1936, as amended, the Secretary of Agriculture is authorized and empowered to make loans to nonprofit cooperatives and others for rural electrification for the purpose of financing the construction and operation of generating plants, electric transmission and distribution lines, or systems for the furnishing and improving of electric service to persons in rural areas (7 U.S. Code [U.S.C.] § 904).

In accordance with Executive Order 14156 of January 20, 2025, Declaring a National Energy Emergency, the proposed action is being considered an "Emergency Project." As such, emergency consultation between RUS and USFWS is underway in accordance with 50 CFR 402.05, and some or all aspects of construction may begin prior to the completion of formal consultation.

## 1.3 PREVIOUS CONSULTATION WITH US FISH & WILDLIFE (USFWS)

On 1/23/2025, Toth and Associates reached out via email to the Missouri Ecological Services Field Office (MESFO) regarding the proposed action. On 2/10/2025, representatives from RUS, Toth and Associates, and CEC met with a representative from MESFO to discuss the project and determine a best course of action going forward. MESFO informed the meeting attendees that formal consultation would be necessary due to the known probable presence of endangered bats and due to the amount of trees being removed. On 2/19/2025, MESFO sent Toth and Associates guidelines for preparing this biological assessment, and this report has been prepared in accordance with those guidelines.

# 2 PROPOSED ACTION

## 2.1 DESCRIPTION OF THE PROPOSED ACTION

The proposed action consists of the construction of an approximately 21.3-mile 69 kV transmission line that will be constructed primarily of steel monopoles. The new line will connect the Salem Bulk Substation north of Farmington, MO to the Valley View Substation north of Bloomsdale, MO This is needed to complete a 69kV loop, greatly improving reliability to members being served by five distribution substations in the area. The Valley View Substation in particular is served by a long, radial 69kV line, and it will greatly benefit from the completion of the loop. Additionally, the new line will allow for future growth of the system through the energization of additional substations in the future. CEC proposes that the area of potential effects (APE) of the proposed action consists of the area shown on the enclosed location maps. The proposed action will be built as three separate segments (shown on the project information map on page 7 of this report and in the appendix).

## 2.2 ACTION AREA

In accordance with 50 CFR 402.02, the “action area” is defined as “all areas affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” As such, analysis of impacts of the proposed action evaluated throughout this report, including figures such as estimated total tree removal, is inclusive of areas of indirect impact such as access routes which will require tree clearing outside of the direct transmission line right-of-way.

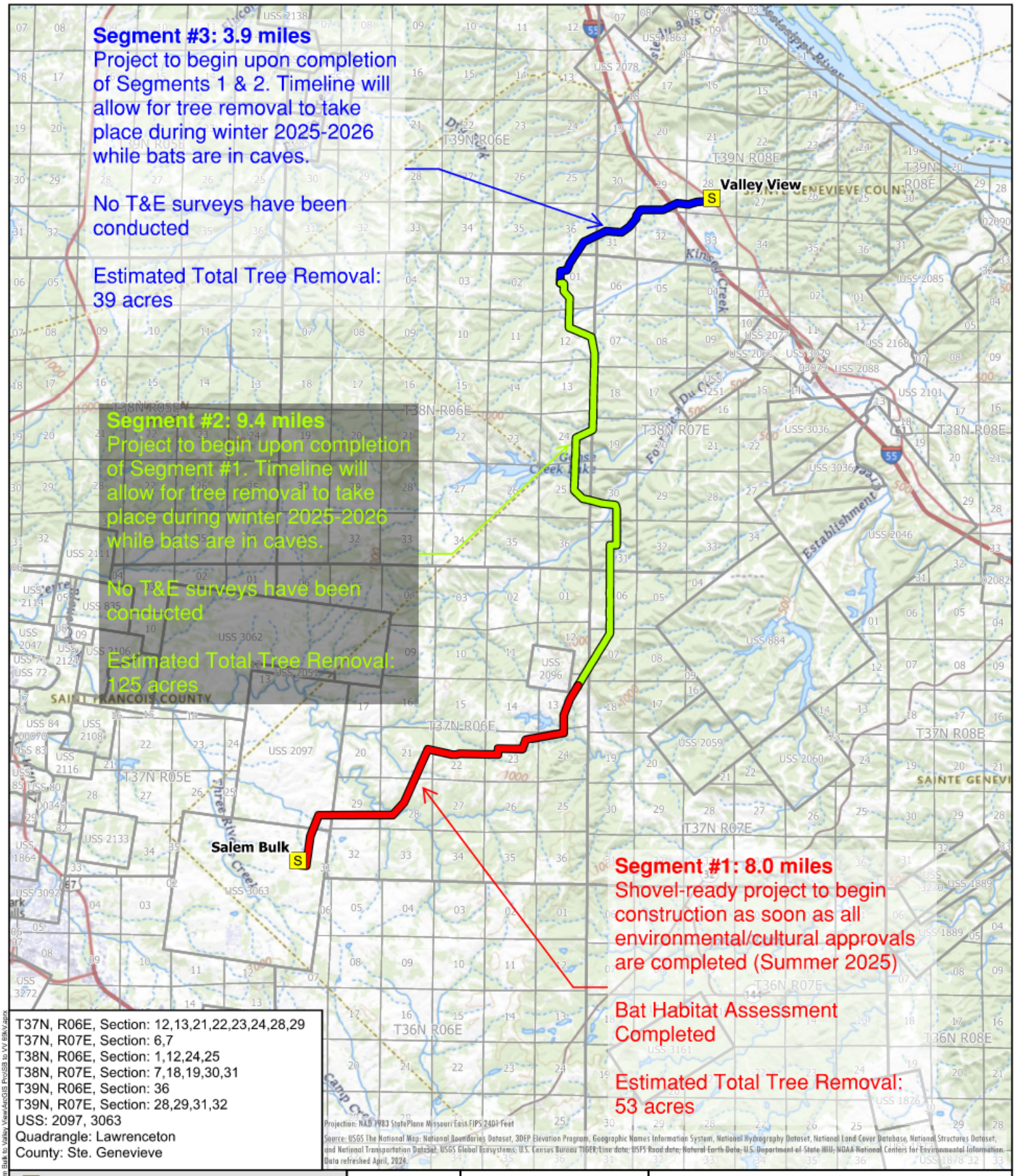
# 3 AFFECTED ENVIRONMENT

## 3.1 OVERVIEW OF ACTION AREA

The following table summarizes information regarding the three line segments.

| Segment | Segment #1 | Segment #2 | Segment #3 |
|---|---|---|---|
| **Length** | 8.0 miles | 9.4 miles | 3.9 miles |
| **T&E Survey** | • Bat Habitat Assessment<br><br>• Threatened and Endangered Species Habitat Assessment | No T&E Surveys have been conducted. | No T&E Surveys have been conducted. |
| **Estimated Total Tree Removal** | 53 acres | 125 acres | 39 acres |
| **Timeline** | Shovel-ready project to begin construction as soon as permitted to do so. | Project to begin upon completion of Segment #1. Timeline will allow for tree removal to take place during winter 2025-2026 while bats are in caves. | Project to begin upon completion of Segments 1 & 2. Timeline will allow for tree removal to take place during winter 2025-2026 while bats are in caves. |
| **Township Range Section** | USS 2097 & 3063<br><br>T37N, R06E, Sections 13, 21, 22, 23, 24, 28, & 32 | T37N, R06E, Sections 12 & 13<br><br>T37N, R07E, Sections 6 & 7<br><br>T38N, R06E, Sections 1, 12, 24, & 25<br><br>T38N, R07E, Sections 7, 18, 19, 30, & 31 | T38N, R06E, Section 1<br><br>T39N, R06E, Section 36<br><br>T39N, R08E, Sections 28, 29, 31, & 32 |

(SCI Engineering, Inc., 2024, April 17) (SCI Engineering, Inc., October 2023)




T37N, R06E, Section: 12,13,21,22,23,24,28,29
T37N, R07E, Section: 6,7
T38N, R06E, Section: 1,12,24,25
T38N, R07E, Section: 7,18,19,30,31
T39N, R06E, Section: 36
T39N, R07E, Section: 28,29,31,32
USS: 2097, 3063
Quadrangle: Lawrenceton
County: Ste. Genevieve

- S Substation
- Segment 1
- Segment 2
- Segment 3
- PLSS Section
- PLSS Township

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DISCLAIMER: This map is for illustrative purposes and should only be used as such.

Map by: babubakari
Date: 2/18/2025

**CITIZENS ELECTRIC CORPORATION**
PERRYVILLE, MISSOURI
MISSOURI 58, STE. GENEVIEVE

Salem Bulk - Valley View
69kV Transmission

USGS Topo

0 15,000 Feet

## 3.2 SPECIES CONSIDERED

Please refer to the following table for a list of Threatened and Endangered Species that have been identified by the Fish and Wildlife Service's Information for Planning and Consultation (IPaC) tool as threatened or endangered that may be present within or near the proposed action's boundaries.

| Species | Scientific Classification | Protection Status |
|---|---|---|
| **Gray Bat** | Myotis grisescens | Endangered |
| **Indiana Bat** | Myotis sodalis | Endangered |
| **Northern Long-eared Bat** | Myotis septentrionalis | Endangered |
| **Tricolored Bat** | Perimyotis subflavus | Proposed Endangered |
| **Eastern Hellbender** | Cryptobranchus alleganiensis alleganiensis | Endangered |
| **Monarch Butterfly** | Danaus plexippus | Proposed Threatened |

The information regarding the species below comes directly from the species overviews, which are publicly available on the US Fish and Wildlife Service website.

### 3.2.1 GRAY BAT

The gray bat (Myotis grisescens) is a medium-sized insectivorous bat with an overall length of about 3.5 inches and a wingspan of 10 to 11 inches. As the name implies, gray bats have gray fur, but the hair often bleaches to reddish-brown by early summer. The gray bat occurs in limestone karst areas, meaning a landscape marked by caves, sinkholes, springs and other features, of the southeastern and midwestern United States. It is estimated that more than 95% of the species range-wide population hibernate in only 15 caves. The gray bat was added to the U.S. List of Endangered and Threatened Wildlife and Plants on April 28, 1976. (USFWS)

#### HABITAT

"Gray bats occupy caves or cave-like structures year-round. While gray bats prefer caves, summer colonies have been documented using dams, mines, quarries, concrete box culverts and the undersides of bridges. Summer caves must be warm or have restricted rooms that can trap the body heat of clustered bats. Winter hibernation sites are often deep vertical caves that trap large volumes of cold air; these caves are naturally very rare. Given that approximately 98% of gray bats roost in as few as 15 major hibernacula, natural calamities at any one of the hibernacula could result in the loss of a significant amount of roosting habitat or bats. Males and females typically hibernate together; however, because of the limited number of suitable caves, gray bats may migrate as many as 500 miles between summer and winter caves. However, based on band

recovery data and the distribution of hibernacula and summer colonies across the range, most gray bats are considered regional migrants with migrations shorter than 200 miles." Gray Bats are one of the few species of bats in North America that inhabit caves year round. (USFWS)

## FOOD

"Gray bats are powerful flyers that hunt over large areas during the breeding season that feed on flying insects over rivers, streams and lakes and other bodies of water. Mayflies, caddisflies and stoneflies make up a major part of their diet, but beetles and moths are also consumed. The Asiatic oak weevil is a favorite summertime food, when it is abundant in forested cliffs along rivers. Most insects are eaten on the wing. Although gray bats prefer to roost in caves near large water bodies, there are records of gray bats commuting up to 20 miles to the nearest large water body from its roosting location each night." (USFWS)

## LIFE CYCLE

Gray bats require two years to reach sexual maturity. Gray bats mate in the fall when they begin to arrive at hibernacula. Female bats store the sperm and fertilization occurs in the spring when bats ovulate. During hibernation, males and females commingle and form large clusters with some aggregations numbering in the hundreds of thousands of individuals. Unlike Indiana bats, which stack tightly together, gray bats form loose clusters. Adult females begin to emerge from hibernation in late March through mid-April, followed by juveniles and adult males." (USFWS)

## LIFE SPAN

"Based on band recovery data, the oldest known gray bat is at least 13 years and 6 months old. Most recaptured gray bats are much younger." (USFWS)

## REPRODUCTION

"Females become pregnant in the spring, and form maternity colonies in caves of a few hundred to many thousands of individuals. Gestation takes somewhere between 60 and 70 days, with pups born in late May and early June. Gray bat summer colonies can use one or multiple caves located along a stream, river or reservoir, but are sometimes located further, yet within commuting distance of a water body. A single offspring is born in late May or early June. Newborns typically become volant within 21 to 33 days after birth." (USFWS)

## 3.2.2 INDIANA BAT

"The Indiana bat is a small, insectivorous, migratory bat that hibernates colonially in caves and mines in the winter. The species was originally listed as in danger of extinction under the Endangered Species Preservation Act of 1966 and is currently listed as endangered under the Endangered Species Act of 1973, as amended. The scientific name of the Indiana bat is Myotis

sodalis. Myotis means ‘mouse ear’ and refers to the relatively small, mouse-like ears of the bats in this genus. Sodalis is the Latin word for “companion” and is a reference to the very social nature of the species. Indiana bats are colonial both in summer and in winter. During hibernation, clusters of up to 500 bats per square foot form in the hibernacula. The species is called the Indiana bat because the first specimen described to science in 1928 was based on a specimen found in southern Indiana’s Wyandotte Cave.” (USFWS)

“Indiana bats require forests for foraging and roosting and are found in forested areas in the eastern half of the United States. In winter, Indiana bats hibernate in caves and mines. They are highly concentrated during hibernation, with 72% of the population hibernating in just four sites in Missouri, Indiana and Illinois. Other states within the range include Alabama, Arkansas, Connecticut, Georgia, Iowa, Kentucky, Maryland, Michigan, Mississippi, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Tennessee, Vermont, Virginia and West Virginia, according to the U.S. Fish and Wildlife Service, 2007. In spring, reproductive females migrate from hibernacula and form maternity colonies in wooded areas where each female bears a single pup that is raised within the colony. Females return to the same colony every summer. Maternity habitat ranges from areas that are completely forested to highly fragmented forest. Maternity colonies are not uniformly distributed across Indiana bat range; the highest density of maternity colonies occurs in the midwest. Males and nonreproductive females often do not roost in colonies and may stay close to their hibernaculum or migrate shorter distances to summer habitat. Summer roosts are typically behind exfoliating bark of large, often dead, trees. Both males and females return to hibernacula in late summer or early fall to mate and enter hibernation.” (USFWS)

## HIBERNATION HABITAT

"During winter, Indiana bats are restricted to suitable underground hibernacula. Most of these sites are caves located in karst areas of the east-central United States; however, Indiana bats also hibernate in other cave-like locations, especially abandoned mines. Currently, the largest known hibernaculum is an abandoned mine in Missouri. Only a small percentage of caves and mines provide the conditions required for successful hibernation; 72% of the population hibernates in just four sites in Missouri, Indiana and Illinois. Most Indiana bats hibernate in caves or mines where the ambient temperature remains below 10°C, or 50.0°F, but above freezing, and remains relatively stable. These hibernacula tend to have large volumes and often have large rooms and vertical or extensive passages. Cave volume and complexity help buffer the cave environment against rapid and extreme changes in outside temperature, and vertical relief helps provide a range of temperatures and roost sites. For recovery, it is essential to conserve and manage those sites with suitable microclimate, and to restore suitable microclimate to sites that have been altered." (USFWS)

## SUMMER HABITAT

"In summer, most reproductive females occupy roost sites in forested areas under the exfoliating bark of dead or dying trees that retain large, thick slabs of peeling bark. Primary roosts usually receive direct sunlight for more than half the day. Roost trees are often within canopy gaps in a forest, in a fenceline, or along a wooded edge. Habitats in which maternity roosts occur include riparian zones, bottomland and floodplain habitats, wooded wetlands and upland communities. Indiana bats typically forage in semi-open to closed forested habitats with open understory, forest edges, and riparian areas. Adult males occupy similar habitats but can use a wider range of roosts compared to females." (USFWS)

## FOOD

"The Indiana bat is a nocturnal insectivore. It emerges shortly after sunset and begins feeding on a variety of insects that are captured and consumed while flying. This species feeds almost exclusively on flying insects. Four orders of insects contribute most to the diet: Coleoptera, including beetles; Diptera, including flies; Lepidoptera, including moths; and Trichoptera, including caddisflies. Which of these is most important varies across the range. Terrestrial-based prey such as moths and beetles have been reported more commonly in southern studies, whereas aquatic-based insects, including flies and caddisflies, dominated in the north. Presumably, this difference indicates that southern bats foraged more in upland habitats, and northern bats hunted more in wetlands or above streams and ponds. Consistent use of moths, flies, beetles and caddisflies throughout the year at various colonies suggests that Indiana bats are selective predators to a certain degree, but incorporation of ants, spiders and mites into the diet also indicates that these bats can be opportunistic. At individual colonies, dietary differences exist between years, within years by week, between pregnancy and lactation, and within nights. These differences reflect availability of preferred types of insects within the foraging areas that the bats are using. High energy demands, especially for reproductive females, dictate that the bats need to

eat large volumes of insects. Indiana bats can eat up to half their body weight in insects each night." (USFWS)

## LIFE CYCLE

The Indiana bat annual cycle includes four major phases: winter hibernation, spring migration, pup rearing, and fall migration and swarming. Depending on local weather conditions, hibernation for Indiana bats typically lasts from October through April, according to Hall, 1962, and LaVal and LaVal, 1980, although it may be extended from September to May in northern areas, according to Kurta et al., 1997, and Hicks, 2004. The nonhibernation season, which includes spring emergence, migration, birth/rearing of pups, and fall swarming, varies depending upon the sex and the location. Males may enter hibernation later than females, and northern latitudes may have shortened nonhibernation seasons. (USFWS)

The Indiana bat is a long-lived species with low fecundity, and as such, the fundamental limiting factors to population viability are number of years over which individual bats are able to produce offspring and the survival of pups to reproductive age. The species' life history strategy is to produce one young each year with high survival rates for both young and adults. (USFWS)

## LIFE SPAN

"Thogmortin et al., 2013, found a mean lifespan 5.7 years. Some individuals live more than 20 years, according to LaVal and LaVal, 1980." (USFWS)

## REPRODUCTION

"Most mating occurs when bats arrive at hibernation sites but prior to hibernation, generally from late August to early October. Bats assemble at cave or mine entrances at dusk and dawn in late August and September. Such staging is believed to facilitate breeding and reduce the chances of inbreeding in small summer colonies (Humphrey and Cope 1977). Ovulation takes place after the bats arouse in spring. Delayed fertilization (from sperm stored from mating months earlier) occurs in most reproductively active females (Guthrie 1933)." (USFWS)

"Females migrate from hibernation sites in spring and form maternity colonies under loose bark of living or dead trees (Humphrey et al. 1977, Garner and Gardner 1992), or less often in artificial roost structures. Maternity colonies usually contain 100 or fewer adult female bats although colonies larger than 300 have been reported. Communal roosting helps females to maintain optimal body temperature to support pregnancy and, after giving birth, to rear pups. Each female gives birth to a single pup between mid-June and early July. Pups are completely dependent on their mother's milk until they can fly. Young bats begin flying and feeding on their own within 25 to 37 days. Females return to the same maternity colony every year." (USFWS)

### 3.2.3 NORTHERN LONG-EARED BAT

"The northern long-eared bat is a wide-ranging, federally endangered bat species, found in 37 states and eight provinces in North America. The species typically overwinters in caves or mines and spends the remainder of the year in forested habitats. As its name suggests, the northern long-eared bat is distinguished by its long ears, particularly as compared to other bats in the genus Myotis." (USFWS)

## WINTER HABITAT

"Northern long-eared bats spend winter hibernating in caves and mines, called hibernacula. They use areas in various sized caves or mines with constant temperatures, high humidity and no air currents. Within hibernacula, surveyors find them hibernating most often in small crevices or cracks, often with only the nose and ears visible." (USFWS)

## SPRING, SUMMER AND FALL HABITAT

"During the summer and portions of the fall and spring, northern long-eared bats may be found roosting singly or in colonies underneath bark, in cavities or in crevices of both live trees and snags, or dead trees. Males and non-reproductive females may also roost in cooler places, like caves and mines. Northern long-eared bats seem to be flexible in selecting roosts, choosing roost trees based on suitability to retain bark or provide cavities or crevices. The species has also been found, although less commonly, roosting in structures, such as barns and sheds. Northern long-eared bats use forested areas not only for roosting, but also for foraging and commuting between summer and winter habitat." (USFWS)

## FOOD

"The northern long-eared bat has a diverse diet including moths, flies, leafhoppers, caddisflies, beetles and arachnids." (USFWS)

## LIFE SPAN

"The maximum northern long-eared bat life span is estimated to be up to 18 and a half years, as noted by J.S. Hall and others in 1968." (USFWS)

## LIFE CYCLE

"Breeding begins in late summer or early fall when males begin to swarm near hibernacula. After copulation, females store sperm during hibernation until spring. In spring, they emerge from their hibernacula, ovulate and the stored sperm fertilizes an egg. This strategy is called delayed fertilization." (USFWS)

"After fertilization, pregnant females migrate to summer areas where they roost in small colonies and give birth to a single pup. Maternity colonies of females and young generally have 30 to 60 bats at the beginning of the summer, although larger maternity colonies have also been seen. Numbers of individuals in roosts typically decrease from pregnancy to post-lactation. Most bats within a maternity colony give birth around the same time, which may occur from late May or early June to late July, depending on where the colony is located within the species' range. Young bats start flying by 18 to 21 days after birth." (USFWS)

### 3.2.4 TRICOLORED BAT

"The tricolored bat (Perimyotis subflavus) is one of the smallest bats native to North America. The once common species is wide ranging across the eastern and central United States and portions of southern Canada, Mexico and Central America. During the winter, tricolored bats are found in caves and mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts. During the spring, summer and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves. As its name suggests, the tricolored bat is distinguished by its unique tricolored fur that appears dark at the base, lighter in the middle and dark at the tip." (USFWS)

"White-nose syndrome, a disease that impacts bats, is caused by a fungal pathogen. It has led to 90 to 100% declines in tricolored bat winter colony abundance at sites impacted by the disease. Since white-nose syndrome was first observed in New York in 2006, it has spread rapidly across the majority of the tricolored bat range." (USFWS)

## HABITAT

"During the spring, summer and fall - collectively referred to as the non-hibernating seasons - tricolored bats primarily roost among live and dead leaf clusters of live or recently dead deciduous hardwood trees. In the southern and northern portions of the range, tricolored bats will also roost in Spanish moss (Tillandsia usneoides) and Usnea trichodea lichen, respectively. In addition, tricolored bats have been observed roosting during summer among pine needles, within artificial roosts like barns, beneath porch roofs, bridges, concrete bunkers, and rarely within caves. Female tricolored bats exhibit high site fidelity, returning year after year to the same summer roosting locations. Female tricolored bats form maternity colonies and switch roost trees regularly. Males roost singly." (USFWS)

"During the winter, tricolored bats hibernate - which means that they reduce their metabolic rates, body temperatures and heart rate - in caves and mines; although, in the southern United States, where caves are sparse, tricolored bats often roost in road-associated culverts and trees, and remain active and feed throughout winter. Tricolored bats exhibit high site fidelity with many individuals returning year after year to the same hibernaculum." (USFWS)

## FOOD

"Tricolored bats are opportunistic feeders and consume small insects including caddisflies, moths, beetles, wasps, flying ants and flies." (USFWS)

## BEHAVIOR

"Tricolored bats emerge early in the evening and forage at treetop level or above, but may forage closer to ground later in the evening. This species of bat exhibits slow, erratic, fluttery flight, while foraging and are known to forage most commonly over waterways and forest edges." (USFWS)

## LIFE CYCLE

"Tricolored bats mate in the fall, hibernate in the winter and emerge in the spring. They then migrate to summer habitat where females form maternity colonies, where young are born. Bats disperse once young can fly, and then return to winter habitats to swarm, mate and hibernate. Tricolored bats exhibit site fidelity to both winter and summer roost habitat." (USFWS)

## LIFE SPAN

"The oldest tricolored bat on record is a male captured 14.8 years, after it was originally captured and banded." (USFWS)

## REPRODUCTION

"Male and female tricolored bats converge at cave and mine entrances between mid-August and mid-October to swarm and mate. Adult females store sperm in their uterus during the winter and fertilization occurs soon after spring emergence from hibernation. Females typically give birth to two young, rarely one or three between May and July. Young grow rapidly and begin to fly at 3 weeks of age and achieve adult-like flight and foraging ability at 4 weeks. Adults often abandon maternity roosts soon after weaning, but young remain longer. Tricolored bats are considered juveniles, called subadults, when entering their first hibernation and most probably do not mate their first fall." (USFWS)

### 3.2.5 EASTERN HELLBENDER

"The eastern hellbender is a large, aquatic salamander that occurs in cool, permanent streams across 15 states. Cool and clear water is important because hellbenders breathe entirely through their skin, which contains numerous folds to increase oxygen absorption. Adult eastern hellbenders spend most of their life under large, flat rocks that shelter them; whereas larval and juvenile hellbenders hide beneath large rocks and under small stones in gravel beds. Eastern hellbenders are one of two subspecies of hellbenders, with the Ozark Hellbender being the other subspecies." (USFWS)

## HABITAT

"Hellbenders live in perennial streams and rivers of the eastern and central United States where they spend much of their time lying motionless under large, flat rocks." (USFWS)

## REPRODUCTION

"Male hellbenders are caretakers for the eggs and young. A male will find a large rock and burrow a space under it for egg laying. He then waits to entice a female to his space. If successful, a female enters the burrow and he will not let her leave until she lays eggs that he fertilizes. The male then maintains and guards the nest until the eggs hatch. There are some indications that even after hatching, males will stay for a time to protect and tend to the young hatchlings." (USFWS)

### 3.2.6 MONARCH BUTTERFLY

"Monarch butterflies are pollinators that are well known for their impressive long-distance migration and their recent declines. The species highlights the need for conservation efforts for all pollinators across the nation. Learn more about monarch conservation efforts, including what the U.S. Fish and Wildlife Service is doing and how you can help." (USFWS)

"With its iconic orange and black markings, the monarch butterfly is one of the most recognizable butterfly species in North America. Their bright coloration serves as a warning to predators that eating them can be toxic, and monarchs obtain these toxins (called cardenolides) by consuming milkweed plants." (USFWS)

"Originally native to North America, the monarch butterfly has dispersed to other parts of the world and non-migratory populations are found from islands in the Pacific Ocean to the western edge of Europe. Despite this expansion, most monarchs continue to live and migrate in North America. North American migratory monarchs are divided into eastern and western populations. The Rocky Mountains generally divide these two populations, limiting their contact. However, the two populations are not completely isolated from each other and still occasionally interbreed. There are also non-migratory monarchs that remain year-round at the southern end of their breeding range in North America, including in parts of Florida, the Gulf Coast and California." (USFWS)

## HABITAT

"Whether it's a field, roadside area, open area, wet area or urban garden, milkweed and flowering plants are needed for monarch habitat. Adult monarchs feed on the nectar of many flowers during breeding and migration, but they lay eggs on milkweed plants as that is the only food the caterpillars can eat." (USFWS)

"For overwintering monarchs, habitat with a specific microclimate is needed for protection from the elements, as well as moderate temperatures to avoid freezing. These conditions vary between populations." (USFWS)

"For the eastern North American population, most monarchs overwinter in oyamel fir tree roosts located in mountainous regions of central Mexico, at an elevation of about 8,000 to nearly 12,000 feet (2,400 to 3,600 meters)." (USFWS)

"Monarchs living west of the Rocky Mountains in North America primarily overwinter in California at sites along the Pacific Coast, roosting in eucalyptus, Monterey pines and Monterey cypress trees." (USFWS)

## FOOD

"Monarch butterflies require healthy and abundant milkweed plants for both laying eggs on and as a food source for caterpillars. By consuming milkweed plants, monarchs obtain toxins, called cardenolides, that provide a defense against predators. Additionally, a wide variety of blooming nectar resources (flowers) are needed for adults throughout the breeding season, migration and overwintering." (USFWS)

In western North America, nectar and milkweed resources are often associated with riparian corridors, and milkweed may function as the principal nectar source for monarchs in more arid regions. (USFWS)

## BEHAVIOR

The monarch butterfly's annual fall migration is one of nature's greatest phenomena. The monarch's journey is one of the longest known insect migrations in the world. Each fall, the eastern and western North American monarchs go into a state of suspended reproduction, known as diapause, and begin migrating to their respective overwintering sites. The eastern population of monarchs travel up to 3,000 miles during migration traveling from Canada, through the U.S. and down to Mexico - a trip that may last more than two months. Tagging and observational data suggest that monarchs can travel up to approximately 70 to 75 miles a day during migration. The longest single day flight of a tagged eastern North American monarch was recorded at 265 miles. (USFWS)

In early spring, surviving monarchs break diapause and mate at the overwintering sites before dispersing. The same individuals that undertook the initial southward migration begin flying back through the breeding grounds. After several generations of monarch offspring in the spring and summer, a new generation begins the fall migration for the first time. (USFWS)

With the year-round presence of milkweed and suitable temperatures, monarchs in many areas of the their worldwide range, including parts of North America, live and breed year round. Many of these non-migratory monarchs are genetically distinct from the migratory North American monarchs, although the southern Florida population gets an annual influx of individuals from the eastern monarch population. (USFWS)

## LIFE CYCLE

Monarchs begin their lifecycle as eggs, which are laid on milkweed plants and hatch after two to five days. The eggs hatch into caterpillars and progress through five instars over the next two weeks before pupating into a green and gold chrysalis. An adult monarch will emerge one to two weeks later. (USFWS)

## LIFE SPAN

Most breeding adult butterflies live approximately two to five weeks, but overwintering adults that enter into reproductive diapause can live six to nine months. (USFWS)

## REPRODUCTION

As temperatures warm at the overwintering sites in the spring, monarchs begin to breed and lay eggs on milkweed throughout their spring journey. The following generations breed and lay eggs throughout the spring and summer. In the fall, monarchs enter a state where they stop reproducing, known as diapause. This allows them to focus their energy and resources on the long-distance migration and surviving the winter. Some non-migratory monarchs in warmer climates breed year-round. (USFWS)

## 3.3 CRITICAL HABITAT

The project area does not contain designated critical habitat of any of the aforementioned species.

# 4 ENVIRONMENTAL BASELINE

## 4.1 EXISTING CONDITIONS OF POTENTIALLY AFFECTED SPECIES

### 4.1.1 GRAY BAT

"At the time of listing, the main historical threats to the gray bat were human disturbance to roosting bats, environmental contamination, impoundment of waterways and roost modification or destruction." "Surveys conducted since 2009 indicate that gray bats do not appear to be susceptible to white-nose syndrome to the same degree as other affected Myotis. No mass mortalities have been documented, although to our knowledge, no studies have attempted to determine if sub-lethal impacts occur in gray bats as a result of white-nose syndrome." (USFWS)

"Due to the diligent and hard work of many federal and state agencies and partners, 32 of 46, or 70%, of biologically significant summering roost sites across the gray bat's range are considered permanently protected. Additionally, of the 15 major hibernacula, 14 are considered permanently protected. Thus, a significant proportion of the gray bat range-wide population is now protected from disturbance in its winter and summer habitat. "(USFWS)

### 4.1.2 INDIANA BAT

"Threats to the species include human disturbance of hibernating bats, commercialization of caves where the bats hibernate, loss of summer habitat, pesticides and other contaminants, and most recently, the disease white-nose syndrome. The range-wide population has declined by 19% since 2007, when white-nose syndrome first arrived in North America." (USFWS)

"The 2019 winter census estimate of the population was 537,297 bats occurring within 223 hibernacula in 16 states. The current population has declined by half compared to when the species was listed as endangered." (USFWS)

### 4.1.3 NORTHERN LONG-EARED BAT

"Although there are many threats to the species, the predominant threat by far is white-nose syndrome. If this disease had not emerged, it is unlikely the northern long-eared bat would be experiencing such a dramatic population decline. White-nose syndrome was the main reason for listing the species as threatened under the Endangered Species Act in 2015. Since symptoms were first observed in New York in 2006, white-nose syndrome has spread rapidly throughout the species' range in the United States. Numbers of northern long-eared bats, gathered from hibernacula counts, have declined by 97 to 100% across the species' range. Due to continued and increased population declines and impacts from threats, on November 29, 2022, the U.S. Fish and Wildlife Service found that the species now meets the definition of an endangered species and published a final rule to reclassify the northern long-eared bat as endangered under the Endangered Species Act." (USFWS)

### 4.1.4 TRICOLORED BAT

"White-nose syndrome, a disease that impacts bats, is caused by a fungal pathogen. It has led to 90 to 100% declines in tricolored bat winter colony abundance at sites impacted by the disease. Since white-nose syndrome was first observed in New York in 2006, it has spread rapidly across the majority of the tricolored bat range." (USFWS)

### 4.1.5 EASTERN HELLBENDER

"In 2021, the U.S. Fish and Wildlife Service listed eastern hellbender populations in Missouri, referred to as a Distinct Population Segment, as endangered. In 2024, the Service proposed to list the eastern hellbender as endangered throughout its entire range due to threats from sedimentation, water quality degradation, habitat destruction, disease, and direct mortality. Of the 626 known historical populations, 41% are believed to be extirpated, and another 36% are declining." (USFWS)

### 4.1.6 MONARCH BUTTERFLY

"The eastern North American migratory monarch population is the largest population of monarchs, in both individuals and range. The eastern population encompasses upwards of 70% of the total North American monarch range. In the fall, they may fly more than 2,000 miles (3,000 km) to reach overwintering sites in Mexico." (USFWS)

"The western North American migratory monarch population is generally found west of the Rocky Mountains. These butterflies can migrate annually 300 to 1,000 miles (about 500 to 1,600 km). The western population overwinters in hundreds of groves (clusters of trees) along the California coast and into northern Baja California, Mexico." (USFWS)

The Monarch Butterfly is currently facing threats in the form of habitat loss primarily from agricultural practices (removal of key milkweed plant), climate change resulting in temperature changes that affect migration, pesticide use, and disturbance to overwintering habitats primarily located in Mexico.

# 5 EFFECTS OF THE ACTION

## 5.1 DIRECT EFFECTS

The proposed action is likely to have direct effects primarily on tree-dwelling species due to the removal of an approximate total of 217 acres of trees. While there will not be intentional take of Threatened or Endangered species, there is potential for destruction of otherwise suitable habitat. Tree-dwelling species that may be directly affected by the proposed action include:

- The Indiana Bat (Endangered)
- The Northern Long-eared Bat (Endangered)
- The Tricolored Bat (Proposed Endangered)

## 5.2 INDIRECT EFFECTS

Indirect effects are not anticipated as a result of this project as there will be no direct impacts to environmentally sensitive locations such as wetlands or waterways. Best management practices will be utilized to minimize excess erosion caused by soil disturbance and all wetlands and waterways will be avoided during construction.

## 5.3 CUMULATIVE EFFECTS

The cumulative effects of the proposed action are those discussed in paragraph 5.1 above.

## 5.4 TEMPORARY AND PERMANENT EFFECTS

The removal of suitable forested habitat within the 100-foot-wide transmission line right-of-way is considered a permanent effect in that the right-of-way will be maintained by CEC for the duration of the suitable life of the line. No substantial vegetation will be allowed to regrow within that right-of-way in order to prevent vegetation from impacting the transmission line.

The removal of trees outside of the 100-foot-wide transmission line right-of-way is required for temporary access routes for construction crews to access the project site. These access routes will not be maintained, and vegetation will be allowed to regrow in these areas. Therefore these effects will be considered temporary.

## 5.5 SPECIES-SPECIFIC IMPACT ANALYSIS

### 5.5.1 GRAY BAT

As discussed previously, the Gray Bat prefers to dwell within caves or similar structures year-round. Therefore, the Gray Bat is unlikely to be impacted by the effects discussed in paragraphs 5.1-5.4 above.

### 5.5.2 INDIANA BAT

As discussed previously, the Indiana Bat's summer habitat consists of trees with exfoliating bark. Therefore, the Indiana Bat may be impacted by the loss of suitable summer habitat discussed in paragraph 5.1 above.

### 5.5.3 NORTHERN LONG-EARED BAT

Similar to the Indiana Bat, the Northern Long-eared Bat prefers to inhabit trees in the spring through fall months. Therefore, the Northern Long-eared Bat may be impacted by the loss of suitable summer habitat discussed in paragraph 5.1 above.

### 5.5.4 TRICOLORED BAT

Similar to the Indiana Bat and the Northern Long-eared Bat, the Tricolored Bat prefers to inhabit trees in the spring through fall months. Therefore, the Tricolored Bat may be impacted by the loss of suitable summer habitat discussed in paragraph 5.1 above.

### 5.5.5 EASTERN HELLBENDER

As discussed previously, the Eastern Hellbender prefers to dwell within perineal streams or rivers. Therefore, the Eastern Hellbender is unlikely to be impacted by the effects discussed in paragraphs 5.1-5.4 above.

### 5.5.6 MONARCH BUTTERFLY

As discussed previously, the Monarch Butterfly prefers to dwell within uncultivated fields that have an abundance of flowering nectar plants, specifically the milkweed plant. Therefore, the Monarch Butterfly is unlikely to be impacted by the effects discussed in paragraphs 5.1-5.4 above.

# 6 CONSERVATION MEASURES AND MITIGATION

## 6.1 AVOIDANCE AND MINIMIZATION MEASURES

There are two critical time windows to consider for each of the tree-dwelling bat species discussed above. The first is the hibernation window. Each of the aforementioned bat species moves to caves or similar structures to hibernate between November 15th and March 15th. Therefore, clearing trees within this window prevents inadvertent take of endangered bat species. The timelines for Segments #2 and #3 of the proposed action will allow for all tree clearing to take place during the hibernation period to minimize impacts to bats. The total tree clearing for Segments #2 and #3 is 164 acres or approximately 75% of the total tree clearing.

The second important window to consider is the pup window from May 15th through July 31st. Mother bats are less able to tolerate relocation from their roosts during this season, and brand new pups may not yet be able to fly in order to relocate. Therefore, it is vital that tree clearing take place outside of this window. Segment #1, which requires approximately 53 total acres of tree clearing, or approximately 25% of the total tree clearing required, will be scheduled so that tree clearing will take place outside of the May 15th through July 31st pup window.

Regarding the non-bat Threatened and Endangered species that may exist near the project area, CEC will implement Best Management Practices and instruct construction crews to avoid wetlands and waterways in order to minimize the possibility of excess erosion, sedimentation, or pollution within nearby wetlands and waterways. CEC will not place any poles directly within wetlands or waterways. These steps will minimize the potential for impacts on the Eastern Hellbender. Should the Monarch Butterfly become officially listed prior to completion of construction, additional avoidance measures will be implemented to minimize impacts. These could include identification and avoidance of destruction to milkweed plants that may occur within the project area.

## 6.2 MITIGATION MEASURES

CEC in coordination with the US Fish and Wildlife Service may purchase mitigation credits with a bat conservation bank. CEC, RUS, and Toth and Associates will work directly with USFWS to determine the number of credits to be purchased in order to effectively offset the potential impacts to the Indiana Bat and Northern Long-eared Bat. Should the Tricolored Bat become officially listed prior to the completion of construction, additional credits from a tricolored bad

conservation bank may be purchased. The number of credits to be purchased will be determined in consultation with USFWS.

## 6.3 MONITORING AND ADAPTIVE MANAGEMENT

Monitoring and adaptive management plans may be discussed between CEC, RUS, Toth and Associates, and USFWS.

# 7 DETERMINATIONS OF EFFECT

## 7.1 NO EFFECT DETERMINATIONS

In light of the aforementioned avoidance measures, namely the use of best management practices and the avoidance of wetlands and waterways, a determination of "No Effect" on the Eastern Hellbender is appropriate.

## 7.2 MAY AFFECT, NOT LIKELY TO ADVERSELY AFFECT (NLAA) DETERMINATIONS

The open field portions of the route are primarily cultivated fields, which do not provide suitable habitat for the Monarch Butterfly. The total ground disturbance where pole holes will be augured is a very small portion of the overall project area. Non-negligible disturbance of Monarch Butterfly habitat is therefore unlikely as a result of the proposed action. In light of this, a "Not Likely to Adversely Affect" determination is appropriate for the Monarch Butterfly.

There is a lack of key Gray Bat hibernacula within the project area. Additionally, the nature of the proposed action does not require impacts to existing structures such as bridges or culverts. In light of this, a determination of "Not Likely to Adversely Affect" on the Gray Bat is appropriate.

## 7.3 MAY AFFECT, LIKELY TO ADVERSELY AFFECT (LAA) DETERMINATIONS

In light of the large amount of tree clearing required for construction of the proposed transmission line, roughly 25 percent of which will not be able to be completed during the hibernation window, a determination of "Likely to Adversely Affect" is appropriate for the Indiana Bat, the Northern Long-eared Bat, and the Tricolored Bat, triggering the need for formal consultation with USFWS. The implementation of the mitigation measures outlined in paragraph 6.2 above will be sufficient in offsetting the adverse effects to these species.

# 8 CONCLUSION AND RECOMMENDATION

## 8.1 CONCLUSTIONS

The following table summarizes the determination of effect and measures taken to offset the impact to the species (if applicable).

| Species and Protection Status | Determination of Effect | Measures Taken to Offset Impact to Species |
|---|---|---|
| **Gray Bat** Endangered | Not Likely to Adversely Affect | |
| **Indiana Bat** Endangered | Likely to Adversely Affect | 75% of tree clearing will take place within hibernation window (November 15th through March 15th). Remaining 25% of tree clearing will take place outside of pup window (May 15th through July 31st). Mitigation credits will be purchased through an Indiana Bat conservation bank. |
| **Northern Long-eared Bat** Endangered | Likely to Adversely Affect | 75% of tree clearing will take place within hibernation window (November 15th through March 15th). Remaining 25% of tree clearing will take place outside of pup window (May 15th through July 31st). Mitigation credits will be purchased through a Northern Long-eared Bat conservation bank. |
| **Tricolored Bat** Proposed Endangered | Likely to Adversely Affect | 75% of tree clearing will take place within hibernation window (November 15th through March 15th). Remaining 25% of tree clearing will take place outside of pup window (May 15th through July 31st). If Tricolored Bat is officially listed prior to project completion, mitigation credits will be purchased through a Tricolored Bat conservation bank. |
| **Eastern Hellbender** Endangered | No Effect | |
| **Monarch Butterfly** Proposed Threatened | Not Likely to Adversely Affect | |

## 8.2 EMERGENCY PROCEDURES

According to Executive Order 14156 of January 20, 2025, Declaring a National Energy Emergency this project is under the status of "Emergency Project." As such, emergency consultation between RUS and USFWS is underway in accordance with 50 CFR 402.05, and some or all aspects of construction may begin prior to the completion of formal consultation.

# 9 REFERENCES

402.05 Emergencies. https://www.ecfr.gov/current/title-50/chapter-IV/subchapter-A/part-402/subpart-A/section-402.05. Accessed March 3, 2025.

Gray Bat *Myotis grisescens*. https://ecos.fws.gov/ecp/species/6329. Accessed March 3, 2025.

Gray Bat. https://www.fws.gov/species/gray-bat-myotis-grisescens. Accessed March 3, 2025.

Indiana Bat *Myotis sodalist*. https://ecos.fws.gov/ecp/species/5949. Accessed March 3, 2025.

Indiana Bat. https://www.fws.gov/species/indiana-bat-myotis-sodalis. Accessed March 3, 2025.

Northern Long-eared Bat *Myotis septentrionalis*. https://ecos.fws.gov/ecp/species/9045. Accessed March 3, 2025.

Northern Long-eared Bat. https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis. Accessed March 3, 2025.

Tricolored Bat *Perimyotis subflavus*. https://ecos.fws.gov/ecp/species/10515. Accessed March 3, 2025.

Tricolored Bat. https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus. Accessed March 3, 2025.

Eastern Hellbender *Cryptobranchus alleganiensis alleganiensis*. https://ecos.fws.gov/ecp/species/9039. Accessed March 3, 2025.

Eastern Hellbender. https://www.fws.gov/species/eastern-hellbender-cryptobranchus-alleganiensis-alleganiensis. Accessed March 3, 2025.

Monarch Butterfly *Danaus Plexippus*. https://ecos.fws.gov/ecp/species/9743. Accessed March 3, 2025.

Monarch. https://www.fws.gov/species/monarch-danaus-plexippus. Accessed March 3, 2025.

Executive Order 14156 Declaring a National Energy Emergency. (2025, January 20). Federal Register Vol. 90, No. 18.

SCI Engineering, Inc. (2024, April 17). *Bat Habitat Assessment SCI No. 2023-0860.3B.*

SCI Engineering, Inc. (October 2023). *Threatened and Endangered Species Habitat Assessment Report.*

(Executive Order 14156 Declaring a National Energy Emergency, 2025)

# 10 APPENDICES

A01 - NEPAssist Report
A02 – USGS National Map
A03 – IPaC Species List
A04 – USFWS May Affect Determination
A05 – Topo Map of Project Area with Notes
A06 - SCI Engineering, Inc. Wetland and Waterbody Delineation Report SCI No. 2023-0860.30
A07 - SCI Engineering, Inc. Bat Habitat Assessment SCI No. 2023-0860.3B
A08 - SCI Engineering, Inc. Threatened and Endangered Species Habitat Assessment Report.
A09 – Executive Order 14156 Declaring a National Energy Emergency

# MO-58, CITIZENS ELECTRIC CORPORATION
# BIOLOGICAL ASSESSMENT
# SALEM BULK – VALLEY VIEW 69 KV TRANSMISSION LINE

## Appendix

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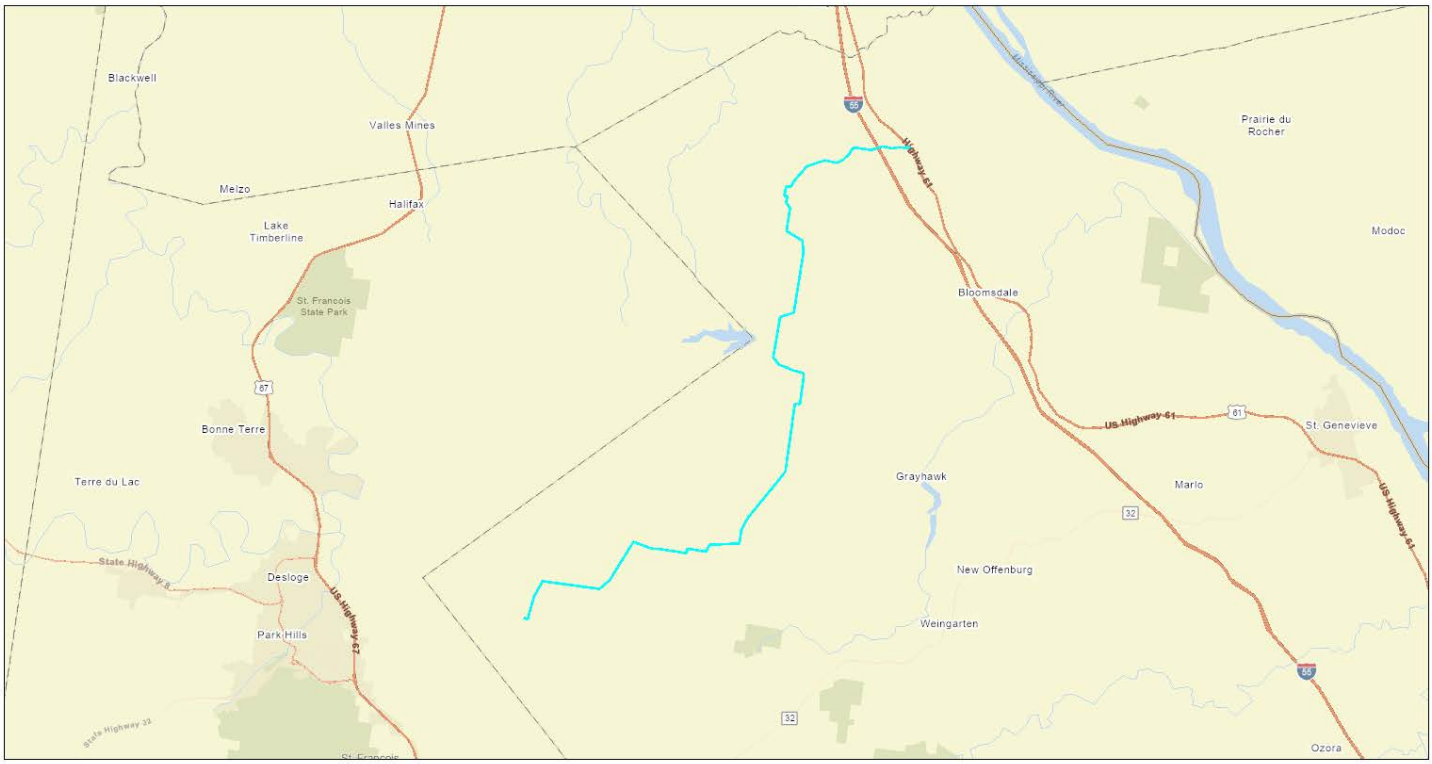
# NEPAssist Report

## Salem Bulk to Valley View




February 14, 2025

Salem Bulk to Valley View

salem_bulk_valley_view 69kv_tline

1:183,450

0 2 4 8 mi

0 3 6 12 km

Missouri Dept. of Conservation, Missouri DNR, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Input Coordinates: 37.869536,-90.410717,37.869309,-90.408723,37.877804,-90.407241,37.883739,-90.404213,37.883760,-90.392679,37.883746,-90.384612,37.883725,-90.383911,37.883746,-90.377695,37.887397,-90.373536,37.902440,-90.365029,37.900923,-90.356441,37.900902,-90.354905,37.901129,-90.353602,37.900902,-90.339876,37.902624,-90.339822,37.902454,-90.331108,37.905105,-90.329887,37.907026,-90.316304,37.912001,-90.316259,37.916700,-90.314023,37.929384,-90.304168,37.935258,-90.299649,37.960378,-90.299497,37.960434,-90.297170,37.970682,-90.297125,37.971801,-90.297529,37.972006,-90.299488,37.972261,-90.302335,37.973104,-90.306234,37.973649,-90.309279,37.976036,-90.312325,37.990919,-90.311615,37.993198,-90.305641,38.014816,-90.304932,38.019593,-90.306063,38.022289,-90.314014,38.030759,-90.313870,38.032613,-90.315936,38.034800,-90.315855,38.034962,-90.316286,38.034948,-90.317247,38.038394,-90.317041,38.038620,-90.314750,38.040644,-90.313762,38.046636,-90.308731,38.049699,-90.300799,38.049423,-90.294996,38.050902,-90.292409,38.053420,-90.289822,38.054106,-90.289714,38.055740,-90.288259,38.055740,-90.280120,38.057600,-90.275045,38.057261,-90.270867,38.057968,-90.268047,38.058286,-90.262962,38.058958,-90.262792,38.059093,-90.262702

| Length of digitized line | 21.27 mi |
|---|---|
| Within 50 feet of an Ozone 1-hr (1979 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of an Ozone 8-hr (1997 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of an Ozone 8-hr (2008 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of an Ozone 8-hr (2015 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a Lead (2008 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a SO2 1-hr (2010 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a PM2.5 24hr (2006 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a PM2.5 Annual (1997 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a PM2.5 Annual (2012 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a PM10 (1987 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a CO Annual (1971 standard) Non-Attainment/Maintenance Area? | no |

| | |
|---|---|
| Within 50 feet of a NO2 Annual (1971 standard) Non-Attainment/Maintenance Area? | no |
| Within 50 feet of a Federal Land? | no |
| Within 50 feet of an impaired stream? | no |
| Within 50 feet of an impaired waterbody? | no |
| Within 50 feet of a waterbody? | no |
| Within 50 feet of a stream? | yes |
| Within 50 feet of an NWI wetland? | Available Online |
| Within 50 feet of a Brownfields site? | no |
| Within 50 feet of a Superfund site? | no |
| Within 50 feet of a Toxic Release Inventory (TRI) site? | no |
| Within 50 feet of a water discharger (NPDES)? | no |
| Within 50 feet of a hazardous waste (RCRA) facility? | no |
| Within 50 feet of an air emission facility? | no |
| Within 50 feet of a school? | no |
| Within 50 feet of an airport? | no |
| Within 50 feet of a hospital? | no |
| Within 50 feet of a designated sole source aquifer? | no |
| Within 50 feet of a historic property on the National Register of Historic Places? | no |
| Within 50 feet of a Chemical Data Reporting (CDR) site? | no |
| Within 50 feet of a Land Cession Boundary? | yes |
| Within 50 feet of a tribal area (lower 48 states)? | no |
| Within 50 feet of the service area of a mitigation or conservation bank? | yes |
| Within 50 feet of the service area of an In-Lieu-Fee Program? | yes |
| Within 50 feet of a Public Property Boundary of the Formerly Used Defense Sites? | no |
| Within 50 feet of a Munitions Response Site? | no |
| Within 50 feet of an Essential Fish Habitat (EFH)? | no |
| Within 50 feet of a Habitat Area of Particular Concern (HAPC)? | no |
| Within 50 feet of an EFH Area Protected from Fishing (EFHA)? | no |
| Within 50 feet of a Bureau of Land Management Area of Critical Environmental Concern? | no |
| Within 50 feet of an ESA-designated Critical Habitat Area per U.S. Fish & Wildlife Service? | no |
| Within 50 feet of an ESA-designated Critical Habitat river, stream or water feature per U.S. Fish & Wildlife Service? | no |

Created on: 2/14/2025 12:49:54 PM

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

In Reply Refer To: 01/21/2025 22:15:24 UTC
Project Code: 2025-0045207
Project Name: MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

## Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).
New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. **Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days.** The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

## Consultation Technical Assistance

Refer to the Midwest Region S7 Technical Assistance website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects:

projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

**Federally Listed Bat Species**

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

*Gray bats* - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features – particularly within stream corridors, riparian areas, or associated upland woodlots –gray bats could be affected.
*Indiana and northern long-eared bats* - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥5 inches diameter at breast height (dbh) for Indiana bat, and ≥3 inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.
Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

**Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species**

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see #3 below) – then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the Species website.
3. If IPac returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:
    a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
    b. Any activity in or near the entrance to a cave or mine;
    c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
    d. Construction of one or more wind turbines; or
    e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of suitable forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the Range-wide Indiana Bat Summer Survey Guidelines.

**Other Trust Resources and Activities**

*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA

to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

**Next Steps**

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.
We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

John Weber

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:

**Missouri Ecological Services Field Office**
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
(573) 234-2132

# PROJECT SUMMARY

Project Code: 2025-0045207
Project Name: MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line
Project Type: Transmission Line - New Constr - Above Ground
Project Description: Transmission line to be constructed in 2025.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.96420005,-90.29715312076002,14z


Counties: Ste. Genevieve County, Missouri

# ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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.

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.

---

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*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6329 | Endangered |
| Indiana Bat *Myotis sodalis*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5949<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/6RR54ML3YVBF5L7KGUX4RC5ZMY/documents/generated/7280.pdf | Endangered |
| Northern Long-eared Bat *Myotis septentrionalis*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9045<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/6RR54ML3YVBF5L7KGUX4RC5ZMY/documents/generated/7280.pdf | Endangered |
| Tricolored Bat *Perimyotis subflavus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/10515 | Proposed Endangered |

## AMPHIBIANS

| NAME | STATUS |
|---|---|
| Eastern Hellbender *Cryptobranchus alleganiensis alleganiensis*<br>Population: Missouri DPS<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9039 | Endangered |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus*<br>There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/9743 | Proposed Threatened |

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: William Deckard
Address: 1550 E. Republic Road
City: Springfield
State: MO
Zip: 65804
Email wdeckard@tothassociates.com
Phone: 4178880645

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

In Reply Refer To: 01/22/2025 19:54:35 UTC
Project code: 2025-0045207
Project Name: MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line

Federal Nexus: yes
Federal Action Agency (if applicable): Rural Utilities Service

**Subject:** Technical assistance for 'MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line'

Dear William Deckard:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on January 22, 2025, for 'MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line' (here forward, Project). This project has been assigned Project Code 2025-0045207 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

**Ensuring Accurate Determinations When Using IPaC**

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key (Dkey), invalidates this letter.**

**Determination for the Northern Long-Eared Bat and Tricolored Bat**

Based on your IPaC submission and a standing analysis completed by the Service, you determined the proposed Project will have the following effect determinations:

| Species | Listing Status | Determination |
|---|---|---|
| Northern Long-eared Bat (*Myotis septentrionalis*) | Endangered | May affect |
| Tricolored Bat (*Perimyotis subflavus*) | Proposed Endangered | May affect |

## Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination key for the northern long-eared bat and tricolored bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Eastern Hellbender *Cryptobranchus alleganiensis alleganiensis* Endangered
- Gray Bat *Myotis grisescens* Endangered
- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Proposed Threatened

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

## Conclusion

Consultation with the Service is not complete. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of "May Affect." A "May Affect" determination in this key indicates that the project, as entered, is not consistent with the questions in the key. Not all projects that reach a "May Affect" determination are anticipated to result in adverse impacts to listed species. These projects may result in a "No Effect", "May Affect, Not Likely to Adversely Affect", or "May Affect, Likely to Adversely Affect" determination depending on the details of the project. Please contact our Missouri Ecological Services Field Office to discuss methods to avoid or minimize potential adverse effects to those species or designated critical habitats.

Federal agencies must consult with U.S. Fish and Wildlife Service under section 7(a)(2) of the Endangered Species Act (ESA) when an action *may affect* a listed species. Tricolored bat is proposed for listing as endangered under the ESA, but not yet listed. For actions that may affect a proposed species, agencies cannot consult, but they can *confer* under the authority of section 7(a)(4) of the ESA. Such conferences can follow the procedures for a consultation and be adopted as such if and when the proposed species is listed. Should the tricolored bat be listed, agencies must review projects that are not yet complete, or projects with ongoing effects within the tricolored bat range that previously received a NE or NLAA determination from the key to confirm that the determination is still accurate. Projects that receive a may affect determination for tricolored bat through the key, should contact the appropriate Ecological Services Field Office if they want to conference on this species.

**Action Description**
You provided to IPaC the following name and description for the subject Action.

**1. Name**

MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line

**2. Description**

The following description was provided for the project 'MO-58 CEC Salem Bulk to Valley View 69kV Transmission Line':

> Transmission line to be constructed in 2025.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.96420005,-90.29715312076002,14z

# DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for a least one species covered by this determination key.

## QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed bats or any other listed species?

   **Note:** Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

   *No*

2. Is the action area wholly within Zone 2 of the year-round active area for northern long-eared bat and/or tricolored bat?

   **Automatically answered**
   *No*

3. Does the action area intersect Zone 1 of the year-round active area for northern long-eared bat and/or tricolored bat?

   **Automatically answered**
   *No*

4. Does any component of the action involve leasing, construction or operation of wind turbines? Answer 'yes' if the activities considered are conducted with the intention of gathering survey information to inform the leasing, construction, or operation of wind turbines.

   **Note:** For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

   *No*

5. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

   *Yes*

6. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

   *No*

7. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

   **Note:** This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

   *Yes*

8. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

   *No*

9. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

   *No*

10. [Semantic] Is the action area located within 0.5 miles of a known 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*

11. Does the action area contain any winter roosts or caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating bats?

    *No*

12. Will the action cause effects to a bridge?

    **Note:** Covered bridges should be considered as bridges in this question.

    *No*

13. Will the action result in effects to a culvert or tunnel at any time of year?

    *No*

14. Are trees present within 1000 feet of the action area?

    **Note:** If there are trees within the action area that are of a sufficient size to be potential roosts for bats answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    *Yes*

15. Does the action include the intentional exclusion of bats from a building or structure?

    **Note:** Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats or tricolored bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local Ecological Services Field Office to help assess whether northern long-eared bats or tricolored bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures.

    *No*

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats?**

    *No*

17. Will the action cause construction of one or more new roads open to the public?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    *No*

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic permanently or temporarily on one or more existing roads?

    **Note:** For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

    *No*

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

    For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

    *No*

20. Will the proposed Action involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

    **Note:** For information regarding NSF/ANSI 60 please visit https://www.nsf.org/knowledge-library/nsf-ansi-standard-60-drinking-water-treatment-chemicals-health-effects

    *No*

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

    *No*

22. Will the action include drilling or blasting?

    *Yes*

23. Will the drilling or blasting produce noise or vibrations above existing background levels that will affect suitable summer habitat for northern long-eared bats and/or tricolored bats?

    **Note:** Additional information defining suitable suitable summer habitat for the northern long-eared bat and/or tricolored bat, can be found in Appendix A in the USFWS' Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines

    *No*

24. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

    *No*

25. Will the proposed action involve the use of herbicides or other pesticides other than herbicides (e.g., fungicides, insecticides, or rodenticides)?

    *No*

26. Will the action include or cause activities that are reasonably certain to cause chronic or intense nighttime noise (above current levels of ambient noise in the area) in suitable summer habitat for the northern long-eared bat or tricolored bat during the active season?

    Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time. Sources of chronic or intense noise that could cause adverse effects to bats may include, but are not limited to: road traffic; trains; aircraft; industrial activities; gas compressor stations; loud music; crowds; oil and gas extraction; construction; and mining.

    **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    *No*

27. Does the action include, or is it reasonably certain to cause, the use of permanent or temporary artificial lighting within 1000 feet of suitable northern long-eared bat or tricolored bat roosting habitat?

    **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    *No*

28. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

    *Yes*

29. Will the proposed action occur exclusively in an already established and currently maintained utility right-of-way?

    *No*

30. Does the action include emergency cutting or trimming of hazard trees in order to remove an imminent threat to human safety or property? See hazard tree note at the bottom of the key for text that will be added to response letters

    **Note:** A "hazard tree" is a tree that is an immediate threat to lives, public health and safety, or improved property.

    *No*

31. Does the project intersect with the 0- 9.9% forest density category?

    **Automatically answered**
    *No*

32. Does the project intersect with the 10.0- 19.9% forest density category map?

    **Automatically answered**
    *No*

33. Does the project intersect with the 20.0- 29.9% forest density category map?

    **Automatically answered**
    *No*

34. Does the project intersect with the 30.0- 100% forest density category map?

    **Automatically answered**
    *Yes*

35. Will the action cause trees to be cut, knocked down, or otherwise brought down across an area greater than 100 acres in total extent?

    *Yes*

36. Does the action area intersect the northern long-eared bat species list area?

    **Automatically answered**
    *Yes*

37. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

    **Automatically answered**
    *No*

38. [Semantic] Is the action area located within 150 feet of a documented northern long-eared bat roost site?

    **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*

39. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
    If unsure, answer "Yes."

    **Note:** Additional information defining suitable summer habitat for the northern long-eared bat and tricolored bat can be found in Appendix A of the USFWS' Range-wide Indiana Bat and Northern long-eared bat Survey Guidelines at: https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines.

    *Yes*

40. Has a presence/probable absence summer bat survey targeting the northern long-eared bat following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area?

    *No*

41. Does the action area intersect the tricolored bat species list area?

    **Automatically answered**
    *Yes*

42. [Semantic] Is the action area located within 0.25 miles of a culvert that is known to be occupied by northern long-eared or tricolored bats?

    **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*

43. Has a presence/probable absence bat survey targeting the tricolored bat and following the Service's Range-wide Indiana Bat and Northern Long-Eared Bat Survey Guidelines been conducted within the project area?

    *No*

44. Is suitable summer habitat for the tricolored bat present within 1000 feet of project activities?
(If unsure, answer ""Yes."")

    **Note:** If there are trees within the action area that may provide potential roosts for tricolored bats (e.g., clusters of leaves in live and dead deciduous trees, Spanish moss (Tillandsia usneoides), clusters of dead pine needles of large live pines) answer ""Yes."" For a complete definition of suitable summer habitat for the tricolored bat, please see Appendix A in the Service's Range-wide Indiana Bat and Northern long-eared Bat Survey Guidelines.

    *Yes*

45. Do you have any documents that you want to include with this submission?

    *No*

# PROJECT QUESTIONNAIRE

Enter the extent of the action area (in acres) from which trees will be removed - round up to the nearest tenth of an acre. For this question, include the entire area where tree removal will take place, even if some live or dead trees will be left standing.

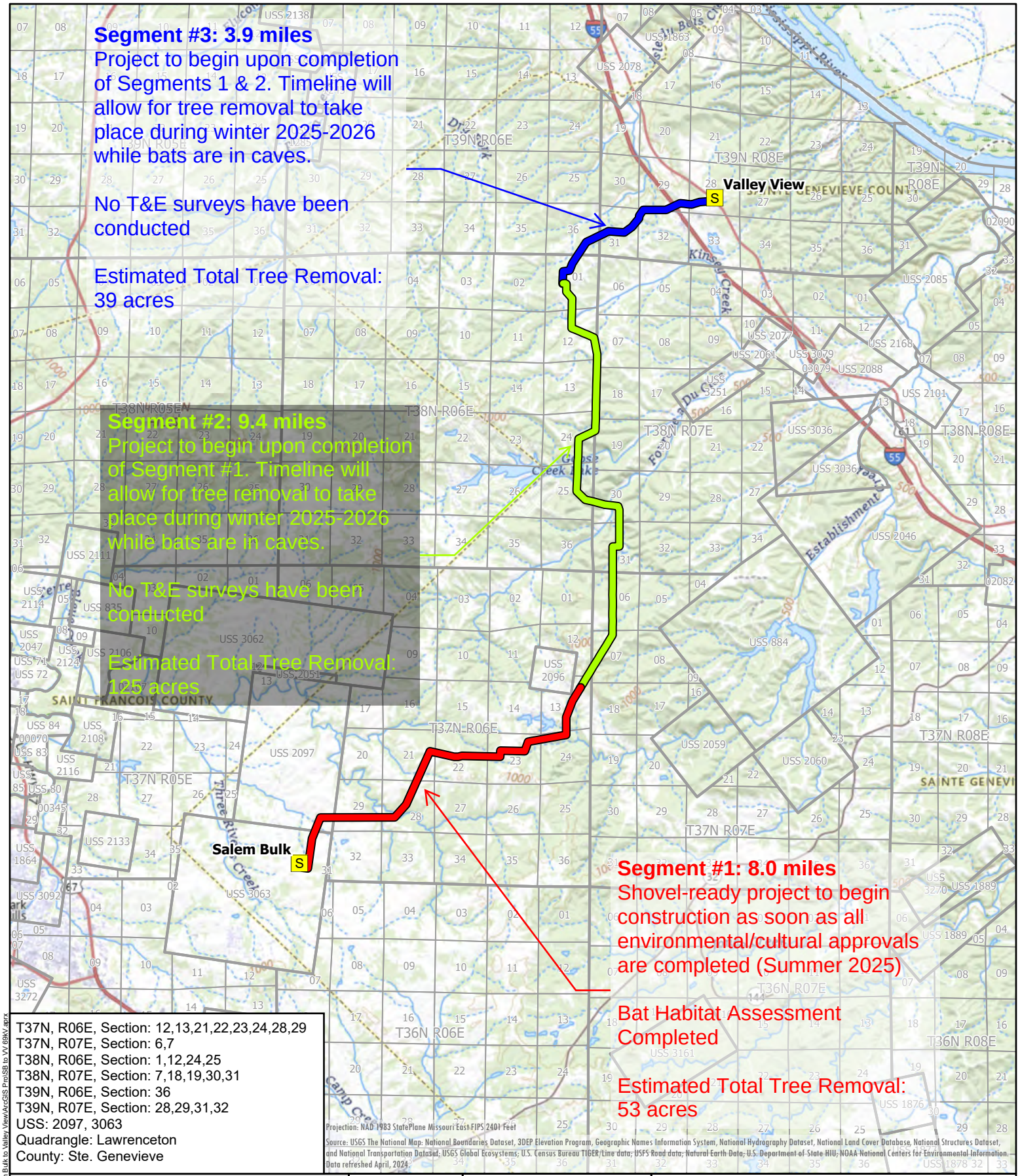
*164.47*

# IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: William Deckard
Address: 1550 E. Republic Road
City: Springfield
State: MO
Zip: 65804
Email wdeckard@tothassociates.com
Phone: 4178880645

# LEAD AGENCY CONTACT INFORMATION

Lead Agency: Rural Utilities Service




T37N, R06E, Section: 12,13,21,22,23,24,28,29
T37N, R07E, Section: 6,7
T38N, R06E, Section: 1,12,24,25
T38N, R07E, Section: 7,18,19,30,31
T39N, R06E, Section: 36
T39N, R07E, Section: 28,29,31,32
USS: 2097, 3063
Quadrangle: Lawrenceton
County: Ste. Genevieve

S Substation
Segment 1
Segment 2
Segment 3
PLSS Section
PLSS Township

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DISCLAIMER: This map is for illustrative purposes and should only be used as such.

Map by: babubakari
Date: 2/18/2025

**CITIZENS ELECTRIC CORPORATION**
PERRYVILLE, MISSOURI
MISSOURI 58, STE. GENEVIEVE

Salem Bulk - Valley View
69kV Transmission

USGS Topo

0 15,000 Feet

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SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

April 17, 2024

Mark E. Walker
Manager, Environmental Services and Licensing
Commonwealth Associates, Inc.
245 W. Michigan Avenue
Jackson, Michigan 49201

RE: Bat Habitat Assessment Summary Letter
WVPA Salem Bulk – Valley View 69kV Transmission Line (Salem to Tower Road)
Ste. Genevieve County, Missouri
SCI No. 2023-0860.3B Task 200

Dear Mark Walker:

SCI Engineering, Inc. (SCI) recently performed a bat habitat assessment (BHA) at the above-referenced site on March 27 and 28, 2024. SCI understands the proposed transmission line project, the Salem Bulk – Valley View 69kV Transmission Line, includes approximately 21 total miles of new line and will serve to complete a loop between Farmington, Missouri and Bloomsdale, Missouri. Phase I of the project, and the subject of this Summary Letter, includes only the first segment of the project which stretches approximately 8.80 miles between the Salem Bulk Substation and Tower Road in Saint Genevieve County, Missouri. SCI understands that tree clearing may be performed to facilitate project construction, and modifications to project schedules have resulted in the potential for tree clearing to commence outside of the winter clearing season. As such, a BHA was necessary to determine the extent of habitat within the project corridor. The *Vicinity and Topographic Map* depicting the site location is enclosed as Figure 1.

Our scope of work included performing site reconnaissance to determine if suitable summer roosting habitat exists for the federally listed endangered Indiana bat (*Myotis sodalis*) and Northern long-eared bat (*Myotis septentrionalis*) within the survey limits. SCI utilized the *2024 U.S. Fish and Wildlife Service Range-Wide Summer Survey Guidelines* during the BHA survey. Potential roost trees within the project corridor were identified and marked with flagging tape. Additionally, representative GPS points were taken for each potential roost tree. A summary of our findings is provided below.

**BAT HABITAT ASSESSMENT SUMMARY**

On March 27 and 28, 2024, SCI Natural Resource Scientists performed a field exploration of the survey area in an effort to identify potentially suitable Indiana bat and Northern long-eared bat summer roosting habitat, as defined in the *U.S. Fish and Wildlife Service (USFWS) Range-wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines*, dated March 2024. The project corridor is composed of stretches of forest and remote agricultural fields. Forested areas within the project corridor are connected to several riparian corridors and large forest stands, including the Hickory Canyons Natural Area. Various tributaries run across and through the length of the project area.

**On-Site Habitat Assessment**

The *Bat Habitat Assessment Datasheets*, provided as Appendix A, were completed at 12 representative locations (Sample Sites 1 through 12) within the 8.80-mile project corridor. Representative photos of existing site conditions are provided in the attached Appendix B – *Photographic Summary*. The location of the sample sites can be found on the *Bat Habitat Assessment and Aerial Photograph*, enclosed as Figure 2. Potentially suitable habitat includes a wide variety of forested habitat, linear features such as fencerows, and in some cases, individual roost trees within 1,000 feet of other forested habitat. Potential roost trees include live and/or dead snag trees greater than or equal to 3 inches in diameter at breast height (DBH) that have sloughing bark, cracks, crevices, and/or hollows.

**Sample Site 1 (SS1)** is located towards the southwestern end of the transmission line corridor. The area is made up of mature forest with a somewhat dense under and midstory. A perennial relatively permanent waterway (RPW) runs through a portion of the sample area. Dominant mature tree species near SS1 include shagbark hickory (*Carya ovata*), white oak (*Quercus alba*), eastern red cedar (*Juniperus virginiana*), and black walnut (*Juglans nigra*). Bush honeysuckle (*Lonicera maackii*) is also scattered throughout the understory. Twenty-seven potential roost trees with peeling bark and crevices as well as thirteen snags with cracks and holes were identified within this sample site.

**Sample Site 2 (SS2)** is located towards the southwestern end of the transmission line corridor. The area is made up of farmland and forest with a generally open understory. A perennial RPW runs through a portion of the sample area. Dominant mature tree species near SS2 include shagbark hickory, white oak, American elm (*Ulmus americana*), and sugar maple (*Acer saccharum*). Bush honeysuckle is also scattered throughout the understory. Two potential roost trees with peeling bark and crevices as well as one snag with cracks and holes were identified within this sample site.

**Sample Site 3 (SS3)** is located towards the southwestern end of the transmission line corridor. The area is made up of farmland and forest with a generally open understory. A perennial RPW runs through a portion of the sample area. Dominant mature tree species near SS3 include shagbark hickory, white oak, eastern red cedar, and pignut hickory (*Carya glabra*). Bush honeysuckle is also scattered throughout the understory. Two potential roost trees with peeling bark and crevices as well as two snags with cracks and holes were identified within this sample site.

**Sample Site 4 (SS4)** is located towards the southwestern end of the transmission line corridor. The area is made up of farmland with small, forested sections on either end. No open waterbodies are located within the stretch, but streams do exist within close proximity. Dominant mature tree species near SS4 include shagbark hickory, white oak, eastern red cedar, and pignut hickory. No potential roost trees with peeling bark and crevices or snags with cracks and holes were identified within this sample site.

**Sample Site 5 (SS5)** is located towards the center of the transmission line corridor. The area is made up of forest with medium density understory and farmland. Two perennial RPWs run through the sample area. Dominant mature tree species near SS5 include shagbark hickory, white oak, eastern red cedar, eastern white pine (*Pinus strobus*) and pignut hickory. Four potential roost trees with peeling bark and crevices as well as seven snags with cracks and holes were identified within this sample site.

**Sample Site 6 (SS6)** is located towards the center of the transmission line corridor. The area is made up of forested areas with dense understories and farmland. A perennial RPW runs through a portion of the sample area. Dominant mature tree species near SS6 include shagbark hickory, white oak, eastern red cedar, and pignut hickory. Bush honeysuckle is also scattered throughout the understory. No potential roost trees with peeling bark and crevices were observed, but four snags with cracks and holes were identified within this sample site.

**Sample Site 7 (SS7)** is located towards the center of the transmission line corridor. The area is made up of forests with dense understories, farmland, and an existing transmission line. Four perennial RPWs run through portions of the sample area. Dominant mature tree species near SS7 include white oak, eastern red cedar, eastern white pine, and northern red oak (*Quercus rubra*). One potential roost tree with peeling bark and crevices as well as one snag with cracks and holes were identified within this sample site.

**Sample Site 8 (SS8)** is located towards the center of the transmission line corridor. The area is made up of forests with somewhat dense understories, grassland, and an existing transmission line. No open waterbodies are located within the stretch, but streams do exist within close proximity. Dominant mature tree species near SS8 include shagbark hickory, white oak, eastern red cedar, and eastern white pine. One potential roost tree with peeling bark and crevices as well as one snag with cracks and holes were identified within this sample site.

**Sample Site 9 (SS9)** is located towards the northeastern end of the transmission line corridor. The area is made up of forests with dense understories, farmland, and grassland. One intermittent RPW and two perennial RPWs run through portions of the sample area. Dominant mature tree species near SS9 include northern red oak, white oak, black walnut (*Juglans nigra*), eastern white pine, and American elm. Two potential roost trees with peeling bark and crevices as well as ten snags with cracks and holes were identified within this sample site.

**Sample Site 10 (SS10)** is located towards the northeastern end of the transmission line corridor. The area is made up of forest with somewhat dense understory. One intermittent RPW runs through portions of the sample area. Dominant mature tree species near SS10 include shagbark hickory, white oak, black walnut, northern red oak, and American elm. One potential roost tree with peeling bark and crevices as well as one snag with cracks and holes were identified within this sample site.

**Sample Site 11 (SS11)** is located towards the northeastern end of the transmission line corridor. The area is made up of forest with somewhat dense understory. One intermittent RPW and one perennial RPW run through a portion of the sample area. Dominant mature tree species near SS11 include shagbark hickory, white oak, black walnut, northern red oak), and American elm. Bush honeysuckle is also scattered throughout the understory. No potential roost trees with peeling bark and crevices were observed, but one snag with cracks and holes was identified within this sample site.

**Sample Site 12 (SS12)** is located towards the northeastern end of the transmission line corridor. The area is made up of forest with somewhat dense understory and farmland. One perennial RPW runs through a portion of the sample area. Dominant mature tree species near SS1 include shagbark hickory, white oak, eastern red cedar, and black walnut. Bush honeysuckle is also scattered throughout the understory. No potential roost trees with peeling bark and crevices were observed, but four snags with cracks and holes were identified within this sample site.

**Conclusion and Recommendations**

Based on our site observations, the transmission line corridor does contain potentially suitable summer roosting habitat for Indiana bats and Northern long-eared bats including a total of 85 potentially suitable roost trees. Snag trees are described as dead trees that have features that include loose or exfoliating bark, holes, cracks, and crevices. Of the 85 roost trees identified within the project corridor, 45 were considered snags. The USFWS recommends that tree clearing be completed within the winter clearing window when bats are expected to be in hibernation (November 1 to March 31) in an effort to avoid potential impacts to threatened or endangered bat species that may be utilizing the site. SCI recommends further coordination with the USFWS if the tree clearing cannot be conducted between November 1 to March 31, as additional studies to determine the presence or absence of bats may be necessary.

SCI is providing our professional opinion regarding the suitability of habitat for the Indiana and northern long-eared bats, as defined in the *USFWS Range-wide Indiana Bat & Northern Long-Eared Bat Survey Guidelines*, dated March 2024. Please keep in mind that the USFWS has the sole authority to determine which areas are classified as suitable bat roosting habitat. Additionally, the USFWS has the authority to regulate any action which may affect a listed threatened or endangered species. Project sites containing suitable bat habitat have the potential to result in a USFWS "may affect" determination and could require additional consultation with the USFWS.

If you have any questions regarding this assessment or need additional information, please contact me at (314) 917-2645 or mholm@sciengineering.com.

Respectfully,

**SCI ENGINEERING, INC.**

Michael S. Holm, CESSWI
Project Scientist

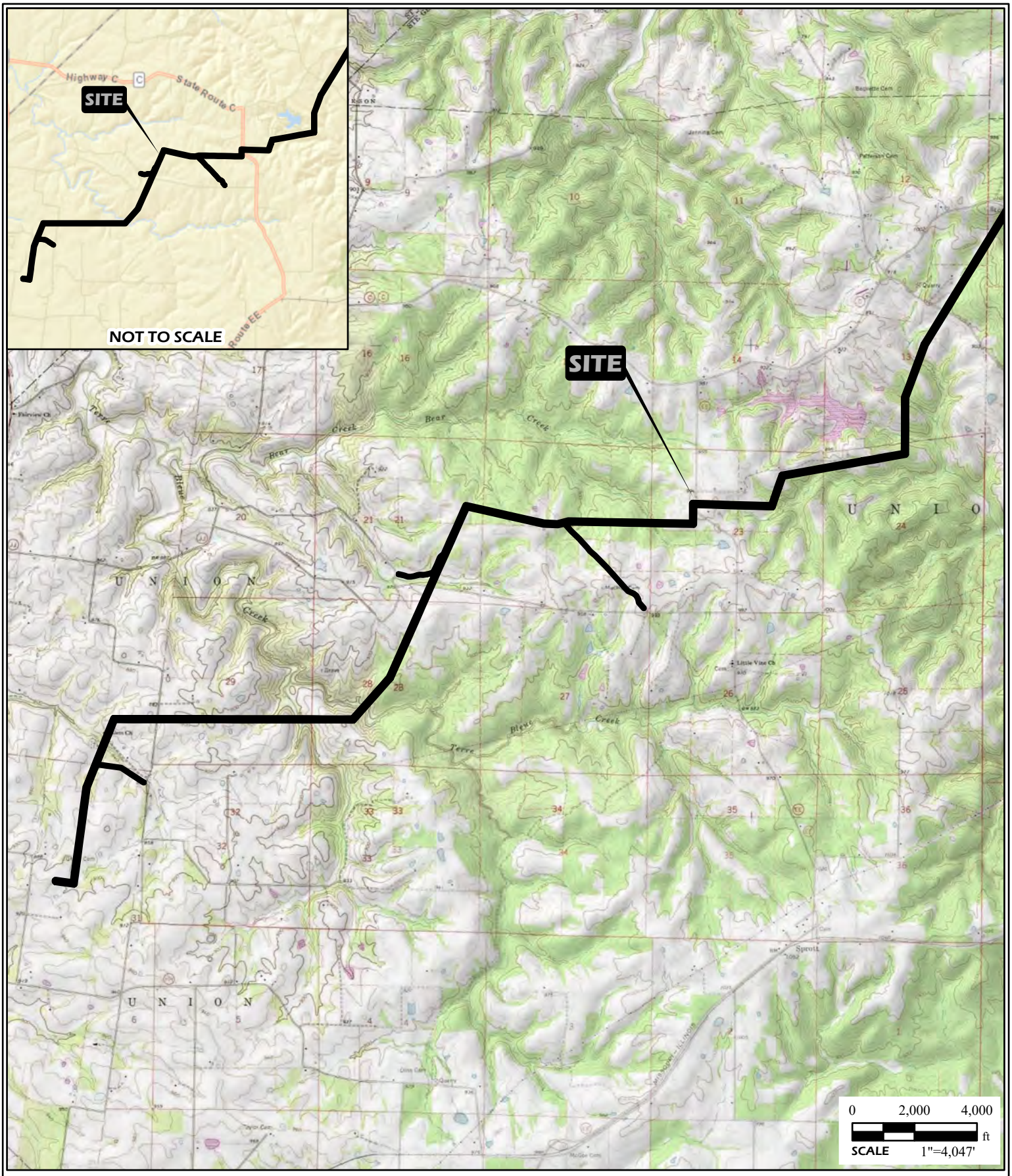
Jacob R. Travelstead
Staff Scientist

Scott E. Billings
Senior Project Scientist

MSH/JRT/SEB/rah

Enclosures

Figure 1 – Vicinity and Topographic Map
Figure 2 – Bat Habitat Assessment
Appendix A – Bat Habitat Assessment Datasheets
Appendix B – Photographic Summary
Appendix C – USFWS IPAC Report
Appendix D – MDC Heritage Database Review




| | | | | |
|---|---|---|---|---|
| | PROJECT NAME<br>WVPA SALEM BULK<br>VALLEY VIEW 69KV TRANSMISSION LINE<br>STE. GENEVIEVE COUNTY, MISSOURI | | | |
| | VICINITY AND TOPOGRAPHIC MAP | | | |
| | DRAWN BY ACV<br>CHECKED BY SEB | FIGURE DATE<br>04/04/2024 | JOB NUMBER<br>2023-0860.3B | |

**GENERAL NOTES/LEGEND**

USGS TOPOGRAPHIC MAP
FRENCH VILLAGE MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

FARMINGTON MISSOURI QUADRANGLE
DATED 1982
20' CONTOURS

USGS TOPOGRAPHIC MAP
LAWRENCETON MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

SPROTT MISSOURI QUADRANGLE
DATED 1964
20' CONTOURS

STREET MAP
HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD_STREET_MAP

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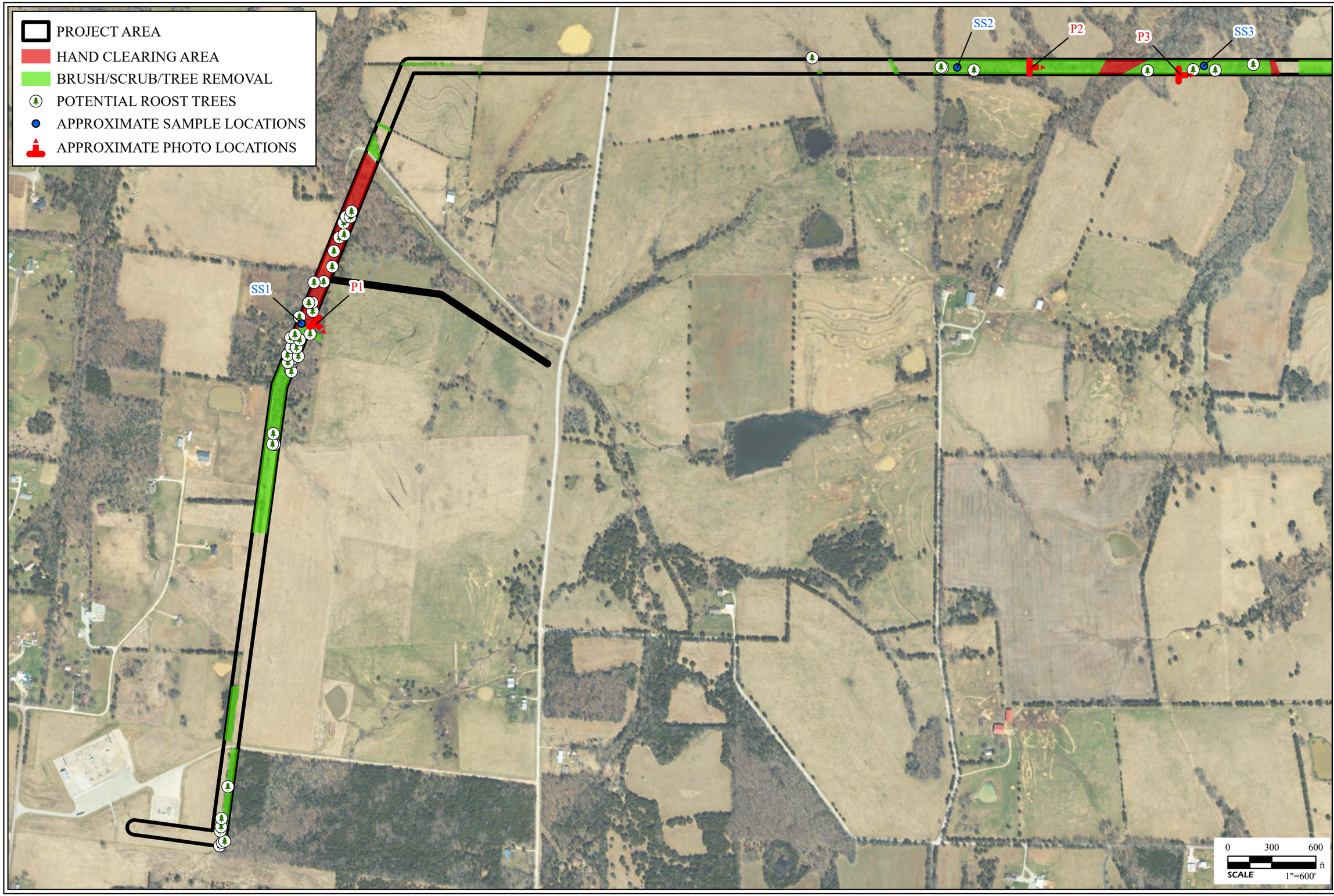
FIGURE
1




**GENERAL NOTES/LEGEND**

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

**PROJECT NAME**

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

BAT HABITAT ASSESSMENT

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**JOB NUMBER** 2023-0860.30

**FIGURE DATE** 04/17/2024

**DRAWN BY** ACV

**CHECKED BY** SEB

**FIGURE** 2.1

PROJECT AREA
HAND CLEARING AREA
BRUSH/SCRUB/TREE REMOVAL
POTENTIAL ROOST TREES
APPROXIMATE SAMPLE LOCATIONS
APPROXIMATE PHOTO LOCATIONS

P6
SS6
P5
SS5
SS4
P4
SS2
P2
P3
SS3

0 300 600 ft
SCALE 1"=600'

**GENERAL NOTES/LEGEND**

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

**PROJECT NAME**
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

BAT HABITAT ASSESSMENT

N
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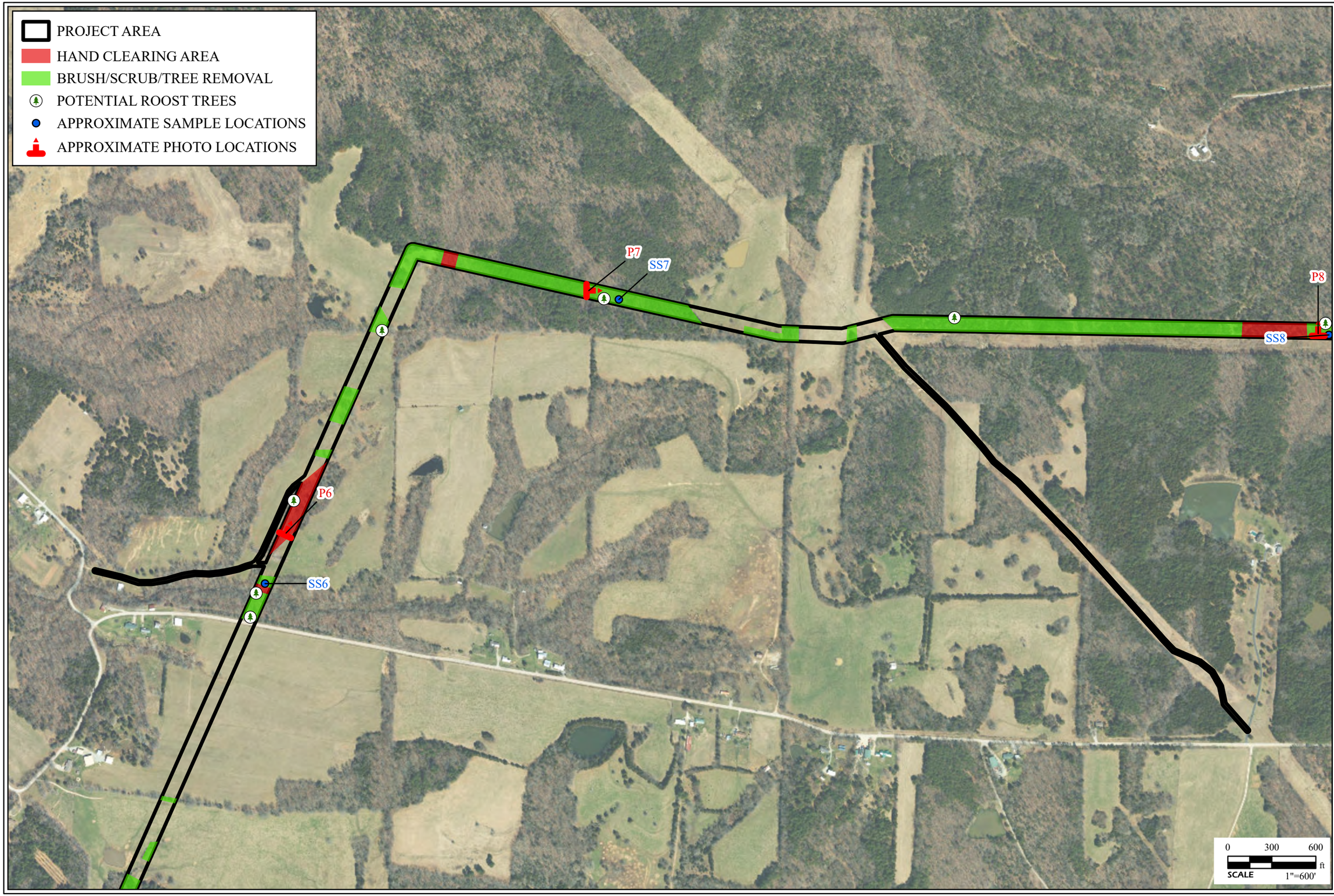
**JOB NUMBER**
2023-0860.30

**FIGURE DATE**
04/17/2024

**DRAWN BY**
ACV

**CHECKED BY**
SEB

**FIGURE**
2.2




GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

BAT HABITAT ASSESSMENT

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JOB NUMBER
2023-0860.30

FIGURE DATE
04/17/2024

DRAWN BY
ACV

CHECKED BY
SEB

FIGURE
2.3

PROJECT AREA
HAND CLEARING AREA
BRUSH/SCRUB/TREE REMOVAL
POTENTIAL ROOST TREES
APPROXIMATE SAMPLE LOCATIONS
APPROXIMATE PHOTO LOCATIONS

P11
SS11
SS10
P10
P9
SS9
P8
SS8

0 300 600 ft
SCALE 1"=600'

**GENERAL NOTES/LEGEND**

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

**PROJECT NAME**
WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

BAT HABITAT ASSESSMENT

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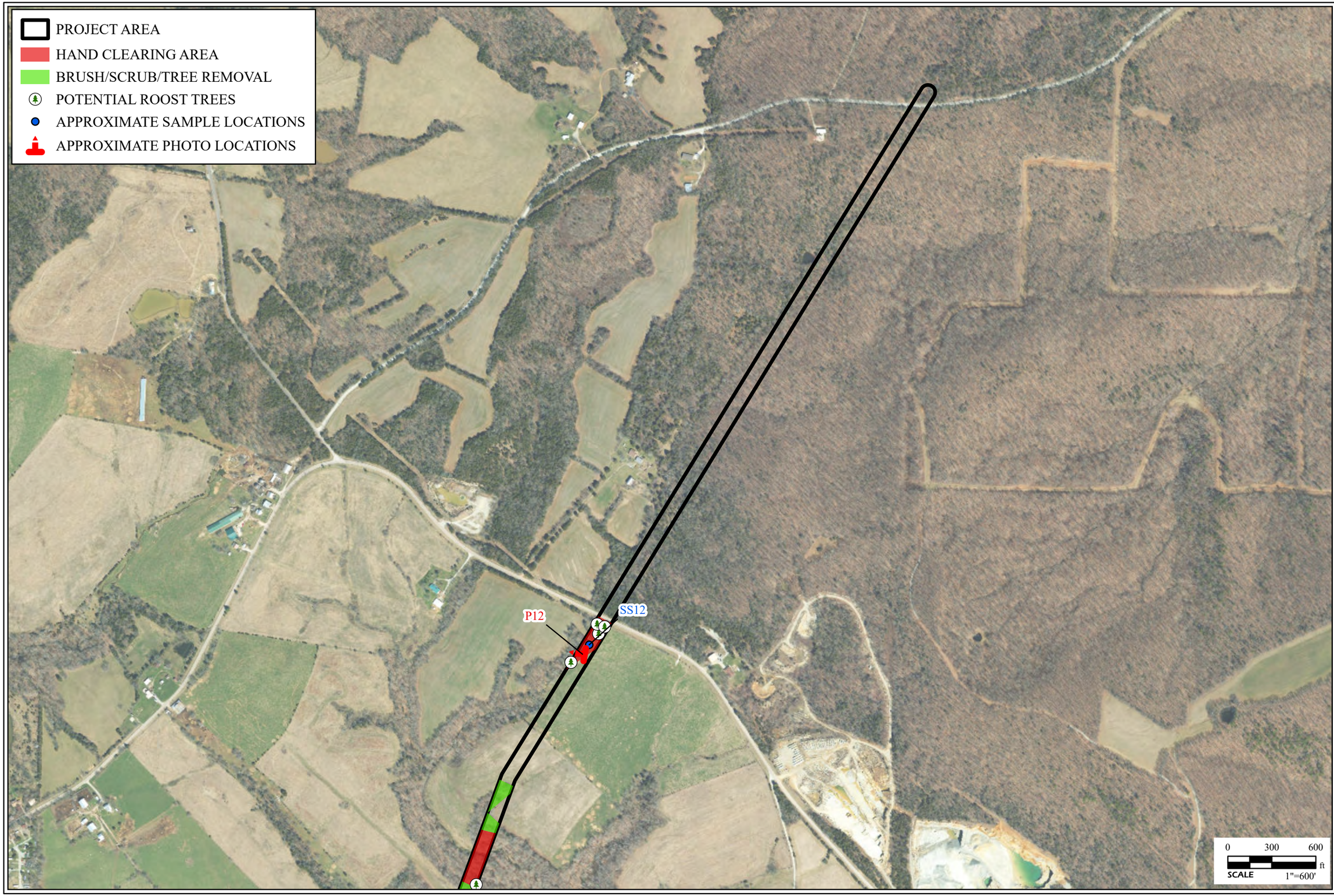
**JOB NUMBER** 2023-0860.30
**FIGURE DATE** 04/17/2024
**DRAWN BY** ACV
**CHECKED BY** SEB
**FIGURE** 2.4




GENERAL NOTES/LEGEND

AERIAL PHOTOGRAPH OBTAINED FROM ARCGIS ONLINE, WORLD IMAGERY.

DIMENSIONS AND LOCATIONS ARE APPROXIMATE; ACTUAL MAY VARY. DRAWING SHALL NOT BE USED OUTSIDE THE CONTEXT OF THE REPORT FOR WHICH IT WAS GENERATED.

PROJECT NAME

WVPA SALEM BULK
VALLEY VIEW 69KV TRANSMISSION LINE
STE. GENEVIEVE COUNTY, MISSOURI

BAT HABITAT ASSESSMENT

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2023-0860.30

FIGURE DATE
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FIGURE
2.5

# Appendix A

# BAT HABITAT ASSESSMENT FORM

| | | | |
|---|---|---|---|
| **Project Name** | WVPA Salem Bulk Transmission Line | **SCI Project No.** | 2023-0860.3B |
| **Township/Range/Section** | 37N, 6E, 21 | **Date** | 3/27/2024 |
| **Latitude/Longitude/UTM/Zone** | 37.901193, -90.365831 | **Surveyor** | JEL, JRT |

**Brief Project Description:**

Wabash Valley Power Alliance is planning to clear approximately 48.79 acres of trees to facilitate the construction of a new transmission line corridor. The site contains a mixture of mature and immature forest, farmland, and grassland througout the full extent of the project area.

| Project Area | | |
|---|---|---|
| **Total Acres** | **Forested Acres** | **Open Acres (non-forested or developed)** |
| 97 | 48.79 | 48.21 |

| Proposed Project Tree Removal (acres) | | |
|---|---|---|
| **Completely Cleared** | **Partially Cleared (will leave trees)** | **Reserved (no clearing)** |
| 39.36 | 9.43 | 48.21 |

**Landscape Within 5 Mile Radius**

**Flight corridors to other forested areas?**

Bordered by large forested tracts in the northeastern half of the corridor.

**Describe Adjacent Properties (e.g. forested, grassland, commercial or residential development, water sources)**

North: Forest, farmland, grassland, residential developments, lake; South: Forest, farmland, grassland, residential developments; East: Forest, farmland, grassland; West: Forest, farmland, grassland

**Vegetative Cover Types**

| Pre-Project | Post-Project |
|---|---|
| Immature and mature forest, farmland, and grassland throughout the full corridor. | Transmission line corridor |

**Proximity to Public Lands**

What is the distance (miles) from the project area to forested public lands? (i.e. national and state forests, national or state parks,conservation areas, wildlife management areas)

| Location | Distance (miles) |
|---|---|
| Hickory Canyons Natural Area | 2.5 miles southeast |
| Horton Farms Conservation Area | 4.3 miles southeast |
| Saint Joe State Park | 6 miles southwest |
| Hawn State Park | 7 miles southeast |
| | |
| | |

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 2/27/24

| **Sample Site** | SS1 |
|---|---|

**General Description**

Sample Site 1 is located towards the southwestern end of the transmission line corridor. The area is made up of forest with a somewhat dense under and midstory.

| **Water Resources At Sample Site** | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 2; 498ft. |

| **Wetlands** | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| **Number and Size of Ponds/Pools** | **Open and Accessible to Bats?** |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

Two perennial relatively permanent waterways (RPWs) enter and exit the corridor within this section. Both RPWs are open and are easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark Hickory, white oak, eastern red cedar, black walnut

| **% Closure/Density of Vegetation** | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 2 | 4 | 5 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| **% Trees w/ Exfoliating Bark** | | | |
|---|---|---|---|
| Shagbark Hickory | White oak | | |
| 50 | 10 | | |

| **Size Composition of Live Trees** | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| **Number of Suitable Snags** | 13 |
|---|---|

| **Is site suitable for Indiana bats?** | **Yes** | **No** |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roosting trees and open water resources within the sample site. As such, SS1 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| **Sample Site** | SS2 |
|---|---|

**General Description**

Sample Site 2 is located towards the southwestern end of the project corridor. The area is made up of farmland and forest with a generally open understory.

| **Water Resources At Sample Site** | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 1; 218ft. |

| **Wetlands** | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| **Number and Size of Ponds/Pools** | **Open and Accessible to Bats?** |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

A perennial RPW stream runs through the project corridor for approximately 218 feet before exiting. The RPW is open and is easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark Hickory, white oak, American elm, sugar maple

| **% Closure/Density of Vegetation** | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 4 | 2 | 4 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| **% Trees w/ Exfoliating Bark** | | | |
|---|---|---|---|
| Shagbark Hickory | | | |
| 30 | | | |

| **Size Composition of Live Trees** | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 50 | 20 |

Small (4-8) Medium (8-15) Large (>15)

| **Number of Suitable Snags** | 1 |
|---|---|

| **Is site suitable for Indiana bats?** | **Yes** | **No** |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

SS2 contains sharbark hickory trees with exfoliating bark as well as an open water resource. As such, the sample site contains suitable summer roosting habitat for listed bat species.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| Sample Site | SS3 |
|---|---|

**General Description**

Sample Site 3 is located towards the southwestern end of the project corridor. The site contains a mixture of farmland and forests with generally open understories.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 1; 110ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

A perennial RPW enters the corridor and runs for approximately 110 feet before exiting. The RPW is enclosed on either side by steep slopes and is not easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark Hickory, white oak, eastern red cedar, pignut hickory

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 3 | 5 | 3 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| White oak | | | |
| 25 | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 2 |
|---|---|

| Is site suitable for Indiana bats? | Yes | No |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roost trees as well as an open water feature within sample site 2. As such, SS2 does contain suitable summer roosting habitat for listed bat species.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| Sample Site | SS4 |
|---|---|

**General Description**

Sample Site 4 is located towards the center of the transmission line corridor. It consists mostly of farmland with small forested sections on either end.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | N/A |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

N/A

**Dominant Species of Mature Trees**

Shagbark Hickory, white oak, eastern red cedar, pignut hickory

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 3 | 3 | 2 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| | | | |
| | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 50 | 20 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 0 |
|---|---|

| Is site suitable for Indiana bats? | Yes | No |
|---|---|---|
| | | X |
| **For northern long-eated bats?** | **Yes** | **No** |
| | | X |

Additional Comments:

There are no potential roost trees or open water resources within the site. Therefore, no suitable summer roosting habitat for listed bat species exists within SS4.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| Sample Site | SS5 |
|---|---|

**General Description**

Sample Site 5 is located towards the center of the transmission line corridor. It is made up of forest with a medium density understory as well as farmland.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 2; 470ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

Two perennial RPWs enter and exit the corridor within this section. Both RPWs are open and are easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark hickory, eastern red cedar, white oak, eastern white pine, pignut hickory

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 4 | 5 | 4 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| White oak | | | |
| 30 | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 40 | 40 | 20 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 7 |
|---|---|

| Is site suitable for Indiana bats? | Yes | No |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roosting trees and open water resources within the sample site. As such, SS5 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| Sample Site | SS6 |
|---|---|

**General Description**

Sample Site 6 is located towards the center of the transmission line corridor. It is made up of forested areas with dense understories and farmland.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 1; 100ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

A perennial RPW runs through the southern portion of the site for approximately 100 feet. The RPW is enclosed by a dense canopy and is not easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark hickory, eastern red cedar, white oak, pignut hickory

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 5 | 4 | 3 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| | | | |
| | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 4 |
|---|---|

| | Yes | No |
|---|---|---|
| Is site suitable for Indiana bats? | X | |
| For northern long-eated bats? | Yes | No |
| | X | |

Additional Comments:

There are potential roost trees as well as an open water feature within sample site 6. As such, SS6 does contain suitable summer roosting habitat for listed bat species.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/27/24

| Sample Site | SS7 |
|---|---|

**General Description**

Sample Site 7 is located towards the center of the transmission line corridor. It is composed of forests with dense understories, farmland, and an existing transmission line.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 4; 525ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

Four separate RPW streams run through and across the project corridor along this section. Two of the RPWs are enclosed by thick canopies and are not easily accessible to bats. The remaining two RPWs are open and are easily accessible to bats.

**Dominant Species of Mature Trees**

Eastern red cedar, white oak, eastern white pine, northern red oak

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 5 | 5 | 3 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| White oak | | | |
| 10 | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 40 | 40 | 20 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 1 |
|---|---|

| Is site suitable for Indiana bats? | Yes | No |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roosting trees and open water resources within the sample site. As such, SS7 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/28/24

| Sample Site | SS8 |
|---|---|

**General Description**

Sample Site 8 is located within the center of the transmission line corridor stretch. It is composed of forest with medium density understory, grassland, and an existing transmission line.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | N/A |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

N/A

**Dominant Species of Mature Trees**

Shagbark hickory, eastern red cedar, white oak, eastern white pine

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 3 | 4 | 2 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| Shagbark Hickory | | | |
| 20 | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 40 | 40 | 20 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 1 |
|---|---|

| Is site suitable for Indiana bats? | Yes | No |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roost trees within sample site 8. As such, SS8 does contain suitable summer roosting habitat for listed bat species.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/28/24

| **Sample Site** | SS9 |
|---|---|

**General Description**

Sample Site 9 is located towards the northeastern end of the transmission line corridor. It is composed of farmland, forests with dense understories, and grassland.

| **Water Resources At Sample Site** | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | 1; 110ft. | 2; 225ft. |

| **Wetlands** | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| **Number and Size of Ponds/Pools** | **Open and Accessible to Bats?** |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

Three RPW streams cross the project corridor along this section. All three RPWs are enclosed by steep slopes or thick canopies and are not easily accessible to bats.

**Dominant Species of Mature Trees**

Northern red oak, white oak, black walnut, eastern white pine, American elm

| **% Closure/Density of Vegetation** | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 5 | 5 | 3 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| **% Trees w/ Exfoliating Bark** | | | |
|---|---|---|---|
| | | | |
| | | | |

| **Size Composition of Live Trees** | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| **Number of Suitable Snags** | 10 |
|---|---|

| **Is site suitable for Indiana bats?** | **Yes** | **No** |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roosting snags and open water resources within the sample site. As such, SS9 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/28/24

| **Sample Site** | SS10 |
|---|---|

**General Description**

Sample Site 10 is located towards the northeastern end of the transmission line corridor. It is composed of forest with medium density understory.

| **Water Resources At Sample Site** | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | 1; 115ft. | N/A |

| **Wetlands** | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| **Number and Size of Ponds/Pools** | **Open and Accessible to Bats?** |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

A RPW stream cuts across the project corridor within this stretch. The RPW is open and is easily accessible to bats.

**Dominant Species of Mature Trees**

Shagbark hickory, white oak, black walnut, northern red oak, American elm

| **% Closure/Density of Vegetation** | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 3 | 4 | 2 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| **% Trees w/ Exfoliating Bark** | | | |
|---|---|---|---|
| Shagbark Hickory | | | |
| 20 | | | |

| **Size Composition of Live Trees** | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| **Number of Suitable Snags** | 1 |
|---|---|

| **Is site suitable for Indiana bats?** | **Yes** | **No** |
|---|---|---|
| | X | |
| **For northern long-eated bats?** | **Yes** | **No** |
| | X | |

Additional Comments:

There are potential roosting trees and open water resources within the sample site. As such, SS10 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/28/24

| Sample Site | SS11 |
|---|---|

**General Description**

Sample Site 11 is located towards the northeastern end of the transmission line corridor. It is composed of forest with medium density understory.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | 1; 210ft. | 1; 115ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

Two RPW streams run across and through the project corridor within this site. One RPW is enclosed by a dense canopy and is not easily accessible to bats. The second RPW is open and is easily accessible.

**Dominant Species of Mature Trees**

Shagbark hickory, white oak, black walnut, northern red oak, American elm

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 4 | 5 | 2 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| | | | |
| | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 1 |
|---|---|

| | Yes | No |
|---|---|---|
| Is site suitable for Indiana bats? | X | |
| For northern long-eated bats? | Yes | No |
| | X | |

Additional Comments:

There are potential roosting snags and open water resources within the sample site. As such, SS11 contains summer roosting habitat for Indiana and northern long-eared bats.

**Site Name** WVPA Salem Bulk Transmission Line **Visit Date** 3/28/24

| Sample Site | SS12 |
|---|---|

**General Description**

Sample Site 12 is located towards the northeastern end of the transmission line corridor. It is composed of forest with medium density understory and farmland.

| Water Resources At Sample Site | | | |
|---|---|---|---|
| | Ephemeral | Intermittent | Perennial |
| Number & Length | N/A | N/A | 1; 290ft. |

| Wetlands | | |
|---|---|---|
| | Permanent | Seasonal |
| Approx. Acreage | N/A | N/A |

| Number and Size of Ponds/Pools | Open and Accessible to Bats? |
|---|---|
| N/A | Yes ☑ No ☐ |

**Describe Existing Condition of Water Resources:**

A perennial RPW stream runs through the project corridor for approximately 290 feet. Most of the RPW corridor is open and easily accessible to bats. A smaller section of the RPW is enclosed by dense canopy and is not easily accessible.

**Dominant Species of Mature Trees**

Shagbark hickory, white oak, eastern red cedar, black walnut

| % Closure/Density of Vegetation | | |
|---|---|---|
| Understory | Midstory | Canopy |
| 4 | 5 | 2 |

1 = 1-10% 2 = 11-20% 3 = 21-40%
4 = 41-60% 5 = 61-80% 6 = 81-100%

| % Trees w/ Exfoliating Bark | | | |
|---|---|---|---|
| | | | |
| | | | |

| Size Composition of Live Trees | | |
|---|---|---|
| Small | Medium | Large |
| 30 | 40 | 30 |

Small (4-8) Medium (8-15) Large (>15)

| Number of Suitable Snags | 4 |
|---|---|

| | Yes | No |
|---|---|---|
| Is site suitable for Indiana bats? | X | |
| For northern long-eated bats? | Yes | No |
| | X | |

Additional Comments:

There are potential roosting snags and open water resources within the sample site. As such, SS12 contains summer roosting habitat for Indiana and northern long-eared bats.

# Appendix B

Photo 1. Forest near southwestern end of corridor, facing southeast.

Photo 2. View of fence line and clearing, facing east.

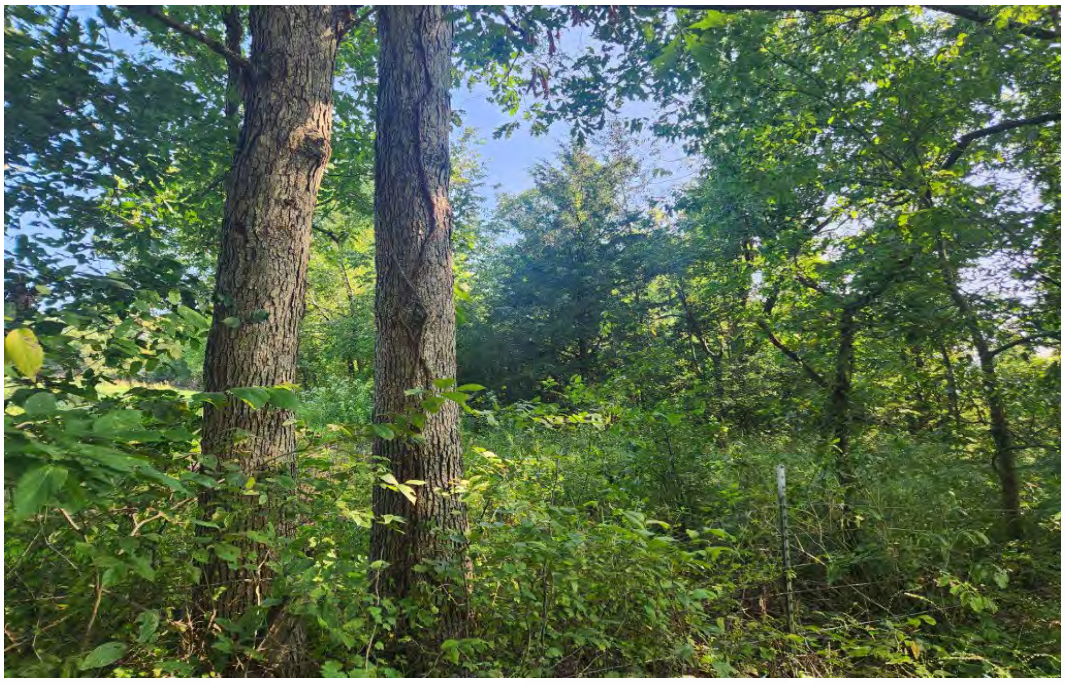


Photo 3. Forest along fence line, facing east.

Photo 4. View of tree line corner, facing northeast.

Photo 5. Forest near southwestern end of corridor, facing southwest.

Photo 6. View of enclosed stream, facing northeast.

Photo 7. Forest near center of corridor, facing east.

Photo 8. Forested stretch along existing transmission corridor, facing north.

Photo 9. Forest near northeastern end of corridor, facing northeast.

Photo 10. Forested slope along stream corridor, facing east.

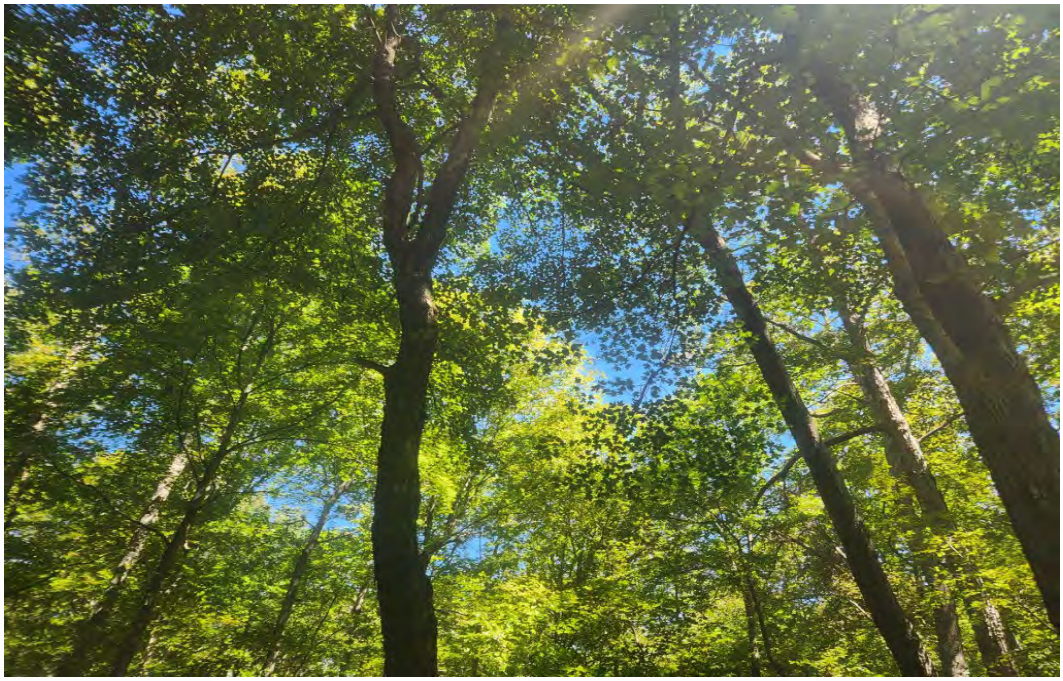


Photo 11. Forest near northeastern end of corridor, facing southwest.

Photo 12. Forest understory along stream, facing west.

# Appendix C

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

In Reply Refer To: 04/05/2024 15:06:35 UTC
Project Code: 2024-0073403
Project Name: WVPA Salem Bulk - Valley View 69kV Transmission Line

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

## Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).
New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. **Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days.** The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

## Consultation Technical Assistance

Refer to the Midwest Region S7 Technical Assistance website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects:

projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

**Federally Listed Bat Species**

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

*Gray bats* - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features – particularly within stream corridors, riparian areas, or associated upland woodlots –gray bats could be affected.
*Indiana and northern long-eared bats* - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥5 inches diameter at breast height (dbh) for Indiana bat, and ≥3 inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.
Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

**Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species**

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see #3 below) – then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the Species website.
3. If IPac returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:
    a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
    b. Any activity in or near the entrance to a cave or mine;
    c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
    d. Construction of one or more wind turbines; or
    e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of suitable forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the Range-wide Indiana Bat Summer Survey Guidelines.

**Other Trust Resources and Activities**

*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA

to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

**Next Steps**

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.
We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

John Weber

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:

**Missouri Ecological Services Field Office**
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
(573) 234-2132

# PROJECT SUMMARY

Project Code: 2024-0073403
Project Name: WVPA Salem Bulk - Valley View 69kV Transmission Line
Project Type: Operations and Maintenance - Electric Power Transmission and Distribution Facilities
Project Description: This project corridor is to be used to construct a new electrical transmission line between substations.
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.899395150000004,-90.36681170272422,14z


Counties: Ste. Genevieve County, Missouri

# ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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.

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.

---

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* | Endangered |
| No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6329 | |
| Indiana Bat *Myotis sodalis* | Endangered |
| There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5949<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/FBVAB65V2NHUNJ4A2TQEDUXYWE/documents/generated/6868.pdf | |
| Northern Long-eared Bat *Myotis septentrionalis* | Endangered |
| No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9045<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/FBVAB65V2NHUNJ4A2TQEDUXYWE/documents/generated/6868.pdf | |
| Tricolored Bat *Perimyotis subflavus* | Proposed Endangered |
| No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/10515 | |

## AMPHIBIANS

| NAME | STATUS |
|---|---|
| Eastern Hellbender *Cryptobranchus alleganiensis* | Endangered |
| Population: Missouri DPS<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9039 | |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus* | Candidate |
| No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9743 | |

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Jacob Travelstead
Address: 650 Pierce Boulevard
City: O'Fallon
State: IL
Zip: 62269
Email jtravelstead@sciengineering.com
Phone: 6186246969

# Appendix D

# Missouri Department of Conservation

Missouri Department of Conservation's Mission is to
protect and manage the forest, fish, and
wildlife resources of the state and to
facilitate and provide opportunities for all citizens to
use, enjoy and learn about these resources.

## Natural Heritage Review Level Two Report: State Listed Endangered Species and/or Missouri Species/Natural Communities of Conservation Concern

There are records of state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact Missouri Department of Conservation for further coordination.

**Foreword:** Thank you for accessing the Missouri Natural Heritage Review Website developed by the Missouri Department of Conservation with assistance from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, Missouri Department of Transportation and NatureServe. The purpose of this report is to provide information to federal, state and local agencies, organizations, municipalities, corporations, and consultants regarding sensitive fish, wildlife, plants, natural communities, and habitats to assist in planning, designing, and permitting stages of projects.

### PROJECT INFORMATION

**Project Name and ID Number:** WVPA Salem Bulk - Valley View 69kV Transmission Line #13066
**Project Description:** This project corridor is to be used for construction of a new transmission line between substations.
**Project Type:** Energy Storage, Production and Transfer, Energy Transfer, Power/electric line
**Contact Person:** Justin Loos
**Contact Information:** jloos@sciengineering.com or 618-624-6969

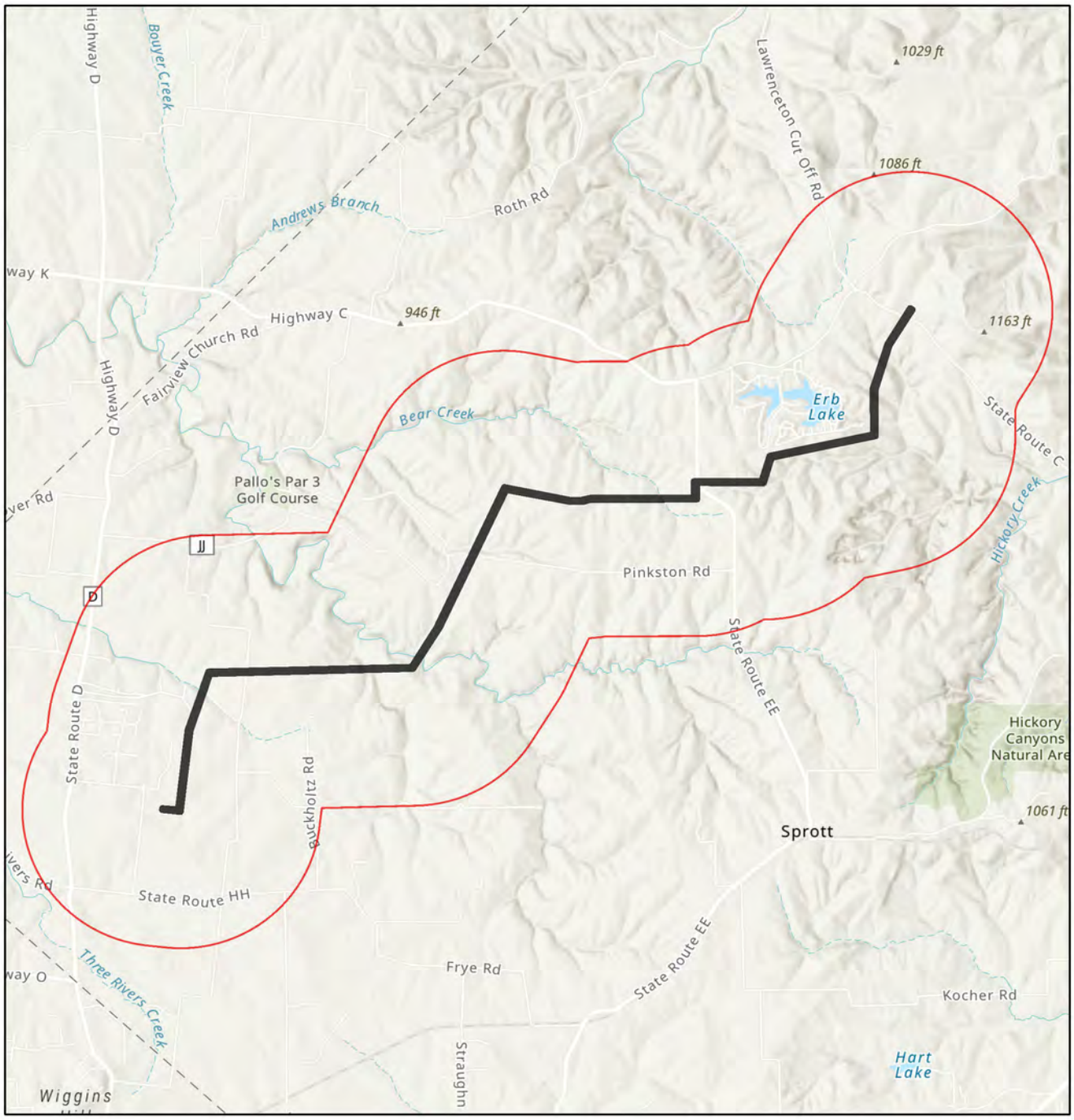
**Disclaimer:** This NATURAL HERITAGE REVIEW REPORT identifies if a species or natural community tracked by the Natural Heritage Program is known to occur within or near the project area submitted, and shares recommendations to avoid or minimize project impacts to sensitive species or natural habitats. Incorporating information from the Natural Heritage Program into project plans is an important step in reducing impacts to Missouri's sensitive natural resources. If an occurrence record is present, or the proposed project might affect federally listed species, the user must contact the Department of Conservation or U.S. Fish and Wildlife Service for more information.

This Natural Heritage Review Report is not a site clearance letter for the project. Rather, it identifies public lands and records of sensitive resources located close to and/or potentially affected by the proposed project. If project plans or location change, this report may no longer be valid. Because land use conditions change and animals move, the existence of an occurrence record does not mean the species/habitat is still present. Therefore, reports include information about records near but not necessarily on the project site. Lack of an occurrence record does not mean that a sensitive species or natural community is not present on or near the project area. On-site verification is the responsibility of the project. However, the Natural Heritage Program is only one reference that should be used to evaluate potential adverse project impacts and additional information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Reviewing current landscape and habitat information, and species' biological characteristics would additionally ensure that Missouri Species of Conservation Concern are appropriately identified and addressed in planning efforts.

**U.S. Fish and Wildlife Service – Endangered Species Act (ESA) Coordination:** Lack of a Natural Heritage Program occurrence record for federally listed species in your project area does not mean the species is not present, as the area may never have been surveyed. Presence of a Natural Heritage Program occurrence record does not mean the project will result in negative impacts. This report does not fulfill Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species. Direct contact with the USFWS may be necessary to complete consultation and it is required for actions with a federal connection, such as federal funding or a federal permit; direct contact is also required if ESA concurrence is necessary. Visit IPaC: Home (fws.gov) to initiate USFWS Information for Planning and Conservation (IPaC) consultation. Contact the Columbia Missouri Ecological Field Services Office (573-234-2132, or by mail at 101 Park Deville Drive, Suite A, Columbia, MO 65203) for more information.

**Transportation Projects:** If the project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or visit Home Page | Missouri Department of Transportation (modot.org) for additional information on recommendations.

# WVPA Salem Bulk - Valley View 69kV Transmission Line




July 20, 2023

1:64,450

0 0.5 1 2 mi

0 0.75 1.5 3 km

Buffered Project Boundary

Project Boundary

Esri, NASA, NGA, USGS, Missouri Dept. of Conservation, Missouri DNR, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA

**Species or Communities of Conservation Concern within the Area:**

There are records of state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact the Missouri Department of Conservation for further coordination.

Email (preferred): NaturalHeritageReview@mdc.mo.gov
MDC Natural Heritage Review
Science Branch
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182

**Other Special Search Results:**

The project occurs on or near public land, Hickory Canyons NA, please contact MDC.

Your project is near a designated Natural Area . Please contact Missouri Department of Conservation (NaturalHeritageReview@mdc.mo.gov) for further coordination.

**Project Type Recommendations:**
Energy Transfer - Transmission line. Cross-country lines affect fish, forest and wildlife resources, as do activities necessary to the construction, maintenance and repair of the lines. Locating new lines along existing road, pipeline and transmission line right-of-ways, can help avoid and minimize project impacts to wildlife resources. Stream and drainage crossings are concerns; following Clean Water Act Section 404 and 401 conditions, if required, will also help to reduce impacts to streams, wetland and water quality. Every effort should be made to avoid erosion, silt introduction, petroleum or chemical pollution, and disruption or realignment of stream banks and beds. Please visit Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams (mo.gov). Revegetation is an important part of managing utility corridors, and it can have significant resource impacts depending on the practices followed. Revegetation of disturbed areas is recommended to minimize erosion, as is restoration with native plant species compatible with the local landscape and wildlife needs. Annuals like ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza. Maintenance of ground cover in utility corridors can have significant implications for sensitive resources. Native plant species typically require low maintenance over the long term, and provide more benefits to native wildlife. Utility corridors can provide wildlife travel corridors, food sources and types of low-growing plant diversity sometimes rare in adjoining land. Mowing and maintenance schedules should consider nesting seasons, and diversity in plant composition.

**Project Location and/or Species Recommendations:**

**Endangered Species Act Coordination - If this project has the potential to alter habitat (e.g. tree removal, projects in karst habitat) or cause direct mortality of bats, please coordinate directly with U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 Ext. 100 for Ecological Services) for further coordination under the Endangered Species Act. Indiana bats** *(Myotis sodalis*, federal- and state-listed endangered) and **Northern long-eared bats** (*Myotis septentrionalis,* federal-listed threatened) may occur near the project area. Both of these species of bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats or Northern long-eared bats, especially from September to April.

**Gray Bat**: The submitted project location is within the range of the Gray Myotis (i.e., Gray Bat) in Missouri. Depending on habitat conditions of your project's location, Gray Myotis (*Myotis grisescens*, federal and state-listed endangered) could occur within the project area, as they forage over streams, rivers, lakes, and reservoirs. Avoid entry or disturbance of any cave inhabited by Gray Myotis and when possible retain forest vegetation along the stream and from the cave opening to the stream. Please see Best Management Practices for Construction and Development Projects Gray bat (mo.gov).

**Karst**: This county has known karst geologic features (e.g., caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are Species of Conservation Concern) are influenced by changes to water quality; please check your project site for any karst features and make every effort to protect groundwater in the project area. Additional information and specific recommendations are available at Management Recommendations for Construction and Development Projects Affecting Missouri Karst Habitat (mo.gov).

**Invasive exotic species** are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment. Please inspect and clean equipment thoroughly before moving between project sites. See Managing Invasive Species in Your Community | Missouri Department of Conservation (mo.gov) for more information.

- Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (>140° F, typically available at do-it-yourself car wash sites), and dry in the hot sun before using again.

**Streams and Wetlands – Clean Water Act Permits:** Streams and wetlands in the project area should be protected from activities that degrade habitat conditions. For example, soil erosion, water pollution, placement of fill, dredging, in-stream activities, and riparian corridor removal, can modify or diminish aquatic habitats. Streams and wetlands may be protected under the Clean Water Act and require a permit for any activities that result in fill or other modifications to the site. Conditions provided within the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit (Kansas City District Regulatory Branch (army.mil)) and the Missouri Department of Natural Resources (DNR) issued Clean Water Act Section 401 Water Quality Certification (Section 401 Water Quality Certification | Missouri Department of Natural Resources (mo.gov) ), if required, should help minimize impacts to the aquatic organisms and aquatic habitat within the area. Depending on your project type, additional permits may be required by the Missouri Department of Natural Resources, such as permits for stormwater, wastewater treatment facilities, and confined animal feeding operations. Visit Wastewater Permits | Missouri Department of Natural Resources (mo.gov) for more information on DNR permits. Visit both the USACE and DNR for more information on Clean Water Act permitting.

**For further coordination with the Missouri Department of Conservation and the U.S. Fish and Wildlife Services, please see the contact information below:**

Email (preferred): NaturalHeritageReview@mdc.mo.gov
MDC Natural Heritage Review
Science Branch
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182

U.S. Fish and Wildlife Service
Ecological Service
101 Park Deville Drive
Suite A
Columbia, MO
65203-0007
Phone: 573-234-2132

**Miscellaneous Information**

FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.

STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and that are protected under the Wildlife Code of Missouri (RSMo 3 CSR 1 0). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR 1 0-4.111. Species tracked by the Natural Heritage Program have a "State Rank" which is a numeric rank of relative rarity. Species tracked by this program and all native Missouri wildlife are protected under rule 3CSR 10-4.110 General Provisions of the Wildlife Code.

See Missouri Species and Communities of Conservation Concern Checklist (mo.gov) for a complete list of species and communities of conservation concern. Detailed information about the animals and some plants mentioned may be accessed at Mofwis Search Results. Please contact the Missouri Department of Conservation to request printed copies of any materials linked in this document.

SCI ENGINEERING, INC.
EARTH • SCIENCE • SOLUTIONS
GEOTECHNICAL
ENVIRONMENTAL
NATURAL RESOURCES
CULTURAL RESOURCES
CONSTRUCTION SERVICES

October 18, 2023

Mark E. Walker
Manager, Environmental Services and Licensing
Commonwealth Associates, Inc.
245 W. Michigan Avenue
Jackson, Michigan 49201

RE: Threatened and Endangered Species Habitat Assessment Report
WVPA Salem Bulk – Valley View 69kV Transmission Line (Salem to Sprott)
Ste. Genevieve County, Missouri
SCI No. 2023-0860.3B

Dear Mark Walker:

SCI Engineering, Inc. (SCI) is pleased to submit the attached *Threatened and Endangered Species Habitat Assessment Report*, dated October 2023. At your request, SCI completed a desktop habitat assessment to determine if the project corridor may contain potential threatened and endangered species habitat that may exist within the project area. The approximately 8.07-mile transmission corridor is located in Ste. Genevieve County, Missouri (Figure 1 - *Vicinity and Topographic Map*). SCI understands that the project includes the construction of a new transmission line that will involve construction of new poles and guy wires, as well as temporary access points and routes. As part of the project development, tree clearing along the project corridor is anticipated. A summary of our threatened and endangered species desktop assessment is provided below.

## HABITAT ASSESSMENT SUMMARY

### Desktop Review

SCI initiated a threatened and endangered species review and assessment by obtaining an official threatened and endangered species list from the United States Fish and Wildlife Service (USFWS). The Information, Planning and Conservation (IPaC) assistance tool was utilized on July 20, 2023, to obtain an official species list for the project corridor. The official species list, enclosed as Appendix A, includes four Federally listed threatened and/or endangered bat species, one endangered amphibian species, and one candidate insect species, that have the potential to occur within the project area and may be affected by the proposed project. A brief description of each of the species and their preferred habitat follows:

- **Gray bat** (*Myotis grisescens*) - This endangered species is generally found in caves year-round. During the winter, gray bats hibernate in deep, vertical caves while in the summer they roost in caves which are scattered along rivers. These caves are typically found in limestone karst areas. During the spring and summer months, gray bats forage along forested riparian corridors as well. **Given the karst topography within the geographical area, gray bat roosting habitat may exist near the project area. The proposed corridor also intersects several riparian corridors surrounded by forested tracts. These areas have the potential to serve as summer foraging habitats for the species. Overall, the potential exists for the species to be present within or near the project area.**

- **Indiana bat** (*Myotis sodalis*) – This endangered species hibernates during the winter in caves or, occasionally, in abandoned mines. They migrate to summer habitat in forested areas after emerging from hibernation. Preferred habitat includes live or dead trees and snags with peeling or exfoliating bark, split trunks, or cavities. Preferred tree species may include eastern cottonwood, maple species, oak species, American elm, ash species, shagbark hickory, or shellbark hickory. Foraging habitat typically includes upland forest, riparian areas, and stream corridors. **The wooded and riparian characteristics of the project corridor lend themselves to being potentially suitable summer roosting and foraging habitat for the Indiana bat. Overall, the potential exists for the species to be present within or near the project area.**

- **Northern long-eared bat** (*Myotis septentrionalis*) – Similar to the Indiana bat, this threatened species hibernates in caves or mines only during the winter. The remainder of the year they roost under loose tree bark in tree crevices or cavities during the day and forage around tree canopies of floodplain, riparian, and upland forests at night. **The wooded and riparian characteristics of the project corridor lend themselves to being suitable summer roosting and foraging habitat for the northern long-eared bat. Overall, the potential exists for the species to be present within or near the project area.**

- **Tricolored bat** (*Perimyotis subflavus*) – Please note that the USFWS recently listed the Tricolored bat as a Proposed Endangered species on September 14, 2022. Proposed Endangered species are in danger of extinction throughout all or a significant portion of their range and the USFWS has proposed a draft rule to list the species as endangered. Proposed Endangered species are not protected by the take prohibitions of Section 9 of the Endangered Species Act (ESA) until the rule to list the species is finalized. If the rule is finalized, it will add this species to the List of Endangered and Threatened Wildlife and extend the ESA's protections to the species.

  Please be advised that this species has similar habitat requirements as the Indiana and northern long-eared bats. In addition, this species also roosts among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. **The wooded and riparian characteristics of the project corridor lend themselves to being suitable summer roosting and foraging habitat for the tricolored bat. Overall, the potential exists for the species to be present within or near the project area.**

- **Eastern Hellbender** (*Cryptobranchus alleganiensis alleganiensis*) **–** Eastern hellbenders are a large aquatic salamander that occur in cool, permanent streams in 15 states. Cold and clear water is important for hellbenders because they breathe entirely through their skin. Adult hellbenders spend most of their life under large, flat rocks that shelter them while larval and juvenile hellbenders hide under large rocks and under small stones in gravel beds. Eastern hellbenders are one of two subspecies of hellbenders. Ozark hellbenders are the second subspecies. In 2021, the USFWS listed the population in Missouri as endangered. The species' current range has remained the same, but populations have decreased by 70 percent since the 1970's. There are conservation efforts to increase population numbers**. Based on our desktop review, the project corridor may possess habitat for the species based on the abundance of tributaries that cross the project area. However, impacts to tributaries within the project corridor are anticipated to be avoided during project construction. Therefore, it is unlikely that project construction will adversely affect the species.**

- **Monarch butterfly (***Danaus plexippus*) - There are generally no Section 7 requirements for candidate species, but the USFWS encourages any opportunity to conserve the species. This large butterfly lives in a variety of habitats throughout North America and across the world.

> During the breeding season, monarchs lay their eggs on their obligate milkweed host plant (primarily Asclepias spp.). Monarchs need nighttime roosting sites during migration. In the western population, roosting generally occurs in both native and non-native deciduous and evergreen trees. Monarchs have been observed using narrow-leaved tree species such as willows, Russian olives, locusts, pines, and eucalyptus as roosting sites. Adults use a wide variety of flowering plants throughout migration and breeding seasons. **There is likely breeding habitat located within the more fallow and unmaintained open fields along the project corridor. However, a large percentage of the corridor is forested or manicured areas. Therefore, it is unlikely that the proposed project will adversely affect the species.**

SCI also initiated a Natural Heritage Review through the Missouri Department of Conservation (MDC) in order to determine the potential for state-listed threatened and endangered species to be impacted by the proposed project. The heritage review was requested on July 20, 2023, and the review request returned a Level Two Report. Level Two reports indicate there are records of species listed under the Federal Endangered Species Act, and possibly also records for species listed Endangered by the state, or Missouri Species and/or Natural Communities of Conservation Concern within or near the defined Project Area. The heritage review has been enclosed as Appendix A. As of the date of this report, no comments have been received from MDC. Additional coordination with MDC may be required for confirmation of any state concerns, but map review indicates that there are no Conservation Areas or Natural Areas within one mile of the project corridor.

The MDC Heritage Review also provides Project Recommendations for Energy Transfer - Transmission line projects. As provided in the Heritage Review, *"Cross-country lines affect fish, forest and wildlife resources, as do activities necessary to the construction, maintenance and repair of the lines. Locating new lines along existing roads, pipeline and transmission line ROWs, can help avoid and minimize project impacts to wildlife resources. Stream and drainage crossings are concerns; following Clean Water Act Section 404 and 401 conditions, if required, will also help to reduce impacts to streams, wetland and water quality. Every effort should be made to avoid erosion, silt introduction, petroleum or chemical pollution, and disruption or realignment of stream banks and beds."*

**Surrounding Landscape**

The surrounding landscape is primarily suburban residential development and undeveloped forested properties and agricultural fields. The following are conservation and natural areas, as well as conservation lands located within 10 miles of the project corridor.

- Hickory Canyons Natural Area – 2.5 miles southeast;
- Hawn State Park – 8 miles southeast;
- St. Joe State Park – 5 miles southwest; and
- St. Francois State Park – approximately 9 miles northwest.

**DESKTOP ASSESSMENT SUMMARY**

In summary, SCI conducted a desktop assessment to determine the potential for threatened and endangered species habitat to exist within the project corridor. Due to a large portion of the project corridor consisting of forested areas, potential summer roosting habitat for the listed bat species as defined by the USFWS may be present within the project area. However, it is our understanding that there

is no federal funding or permitting requirements associated with the project. Based on a phone discussion with the USFWS on October 17, 2023, if there is no federal nexus associated with the project, the USFWS does not have the authority to require studies to be conducted prior to tree clearing. They do recommend that tree clearing efforts be conducted between November 1 and April 1 in an effort to avoid and minimize impacts to the listed bat species. In addition, SCI has reached out to MDC to obtain additional feedback on the Level Two Response generated by the Heritage Database Review. As of the date of this report, MDC has not provided a response. SCI will forward along the MDC response if and when it is received.

SCI is providing our professional opinion regarding the suitability of habitat for threatened and endangered species. Although SCI is providing our professional opinion, the USFWS and MDC have the sole authority to determine if the project corridor contains suitable habitat for Federally or State listed species. Likewise, the USFWS and MDC have the sole authority to regulate any action which may affect a Federally or State listed threatened or endangered species.

If you have any questions regarding this assessment or need additional information, please contact me at (618) 206-3038 or sbillings@sciengineering.com.

Respectfully,

**SCI ENGINEERING, INC.**

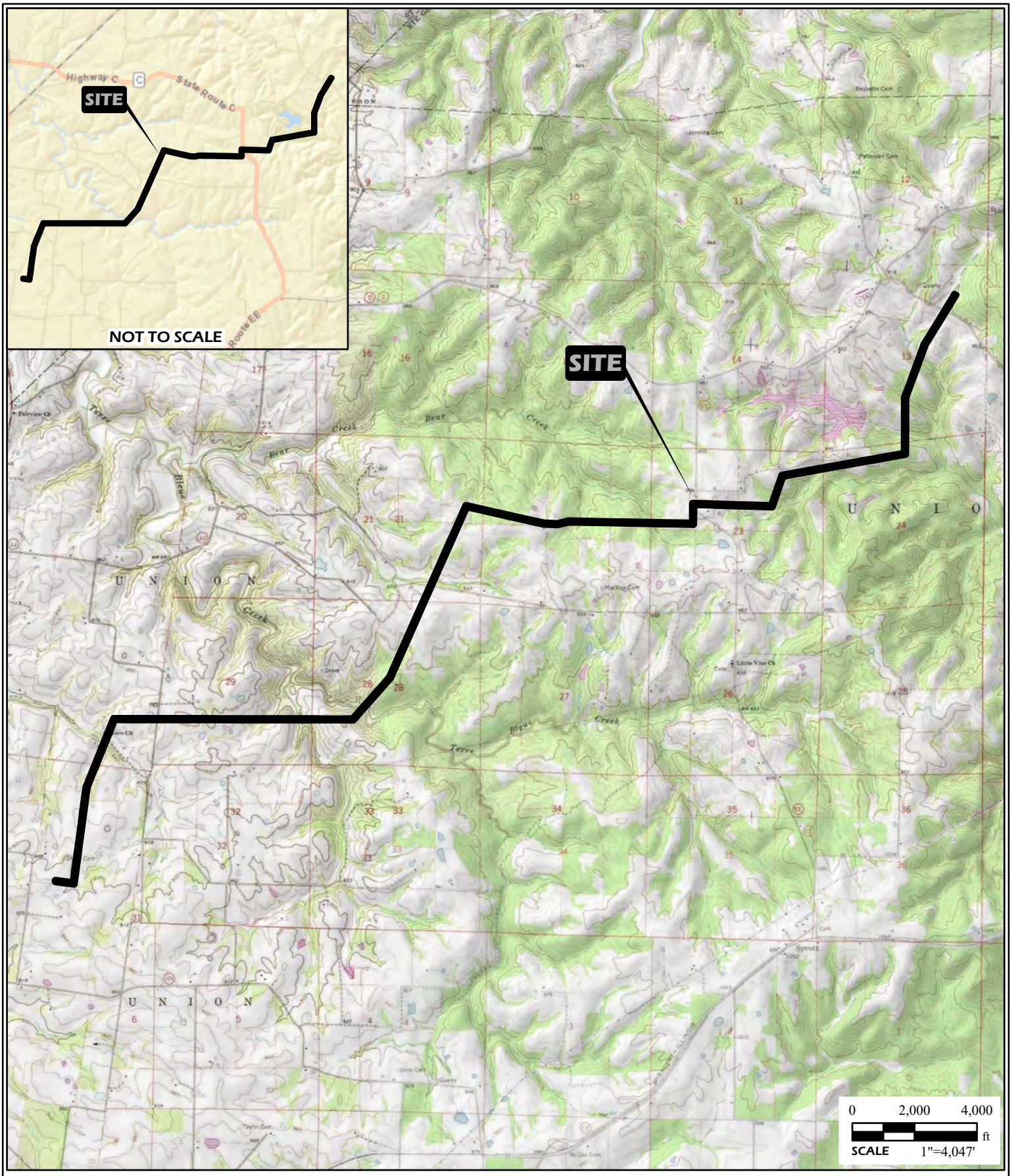
Jacob R. Travelstead
Staff Scientist

Scott E. Billings
Senior Project Scientist

JRT/SEB/rah

Enclosures

Figure 1 – Vicinity and Topographic Map
Appendix A – USFWS IPAC Report
Appendix B – MDC Heritage Database Review




| | | | | |
|---|---|---|---|---|
| PROJECT NAME<br>WVPA SALEM BULK<br>VALLEY VIEW 69KV TRANSMISSION LINE<br>STE. GENEVIEVE COUNTY, MISSOURI | | | | |
| VICINITY AND TOPOGRAPHIC MAP | | | | |
| DRAWN BY | ACV | DATE | JOB NUMBER | |
| CHECKED BY | SEB | 10/2023 | 2023-0860.3B | |

**GENERAL NOTES/LEGEND**

USGS TOPOGRAPHIC MAP
FRENCH VILLAGE MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

FARMINGTON MISSOURI QUADRANGLE
DATED 1982
20' CONTOURS

USGS TOPOGRAPHIC MAP
LAWRENCETON MISSOURI QUADRANGLE
DATED 1964
10' CONTOURS

SPROTT MISSOURI QUADRANGLE
DATED 1964
20' CONTOURS

STREET MAP
HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD_STREET_MAP

N
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FIGURE
1

# Appendix A

# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Missouri Ecological Services Field Office
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
Phone: (573) 234-2132 Fax: (573) 234-2181

In Reply Refer To: July 20, 2023
Project Code: 2023-0107145
Project Name: WVPA Salem Bulk - Valley View 69kV Transmission Line

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

## Threatened and Endangered Species

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and may be affected by your proposed project. The species list fulfills the requirement for obtaining a Technical Assistance Letter from the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).
New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. **Note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, 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 information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

## Consultation Technical Assistance

Refer to the Midwest Region S7 Technical Assistance website for step-by-step instructions for making species determinations and for specific guidance on the following types of projects:

projects in developed areas, HUD, pipelines, buried utilities, telecommunications, and requests for a Conditional Letter of Map Revision (CLOMR) from FEMA.

## Federally Listed Bat Species

Indiana bats, gray bats, and northern long-eared bats occur throughout Missouri and the information below may help in determining if your project may affect these species.

*Gray bats* - Gray bats roost in caves or mines year-round and use water features and forested riparian corridors for foraging and travel. If your project will impact caves, mines, associated riparian areas, or will involve tree removal around these features – particularly within stream corridors, riparian areas, or associated upland woodlots –gray bats could be affected.
*Indiana and northern long-eared bats* - These species hibernate in caves or mines only during the winter. In Missouri the hibernation season is considered to be November 1 to March 31. During the active season in Missouri (April 1 to October 31) they roost in forest and woodland habitats. Suitable summer habitat for Indiana bats and northern long-eared bats consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥5 inches diameter at breast height (dbh) for Indiana bat, and ≥3 inches dbh for northern long-eared bat, that have exfoliating bark, cracks, crevices, and/or hollows), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. Tree species often include, but are not limited to, shellbark or shagbark hickory, white oak, cottonwood, and maple. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet (305 meters) of other forested/wooded habitat. Northern long-eared bats have also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat and evaluated for use by bats. If your project will impact caves or mines or will involve clearing forest or woodland habitat containing suitable roosting habitat, Indiana bats or northern long-eared bats could be affected.
Examples of unsuitable habitat include:

- Individual trees that are greater than 1,000 feet from forested or wooded areas;
- Trees found in highly-developed urban areas (e.g., street trees, downtown areas);
- A pure stand of less than 3-inch dbh trees that are not mixed with larger trees; and
- A stand of eastern red cedar shrubby vegetation with no potential roost trees.

## Using the IPaC Official Species List to Make No Effect and May Affect Determinations for Listed Species

1. If IPaC returns a result of “There are no listed species found within the vicinity of the project,” then project proponents can conclude the proposed activities will have **no effect** on any federally listed species under Service jurisdiction. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.

2. If IPaC returns one or more federally listed, proposed, or candidate species as potentially present in the action area of the proposed project – other than bats (see #3 below) – then project proponents can conclude the proposed activities **may affect** those species. For assistance in determining if suitable habitat for listed, candidate, or proposed species occurs within your project area or if species may be affected by project activities, you can obtain Life History Information for Listed and Candidate Species through the Species website.
3. If IPac returns a result that one or more federally listed bat species (Indiana bat, northern long-eared bat, or gray bat) are potentially present in the action area of the proposed project, project proponents can conclude the proposed activities **may affect** these bat species **IF** one or more of the following activities are proposed:
    a. Clearing or disturbing suitable roosting habitat, as defined above, at any time of year;
    b. Any activity in or near the entrance to a cave or mine;
    c. Mining, deep excavation, or underground work within 0.25 miles of a cave or mine;
    d. Construction of one or more wind turbines; or
    e. Demolition or reconstruction of human-made structures that are known to be used by bats based on observations of roosting bats, bats emerging at dusk, or guano deposits or stains.

If none of the above activities are proposed, project proponents can conclude the proposed activities will have **no effect** on listed bat species. Concurrence from the Service is not required for **No Effect** determinations. No further consultation or coordination is required. Attach this letter to the dated IPaC species list report for your records. An example "No Effect" document also can be found on the S7 Technical Assistance website.
If any of the above activities are proposed in areas where one or more bat species may be present, project proponents can conclude the proposed activities **may affect** one or more bat species. We recommend coordinating with the Service as early as possible during project planning. If your project will involve removal of over 5 acres of suitable forest or woodland habitat, we recommend you complete a Summer Habitat Assessment prior to contacting our office to expedite the consultation process. The Summer Habitat Assessment Form is available in Appendix A of the most recent version of the Range-wide Indiana Bat Summer Survey Guidelines.

**Other Trust Resources and Activities**

*Bald and Golden Eagles* - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. Should bald or golden eagles occur within or near the project area please contact our office for further coordination. For communication and wind energy projects, please refer to additional guidelines below.

*Migratory Birds* - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA

to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of recommendations that minimize potential impacts to migratory birds. Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

*Communication Towers* - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed voluntary guidelines for minimizing impacts.

*Transmission Lines* - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to guidelines developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

*Wind Energy* - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's Wind Energy Guidelines. In addition, please refer to the Service's Eagle Conservation Plan Guidance, which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

**Next Steps**

Should you determine that project activities **may affect** any federally listed species or trust resources described herein, please contact our office for further coordination. Letters with requests for consultation or correspondence about your project should include the Consultation Tracking Number in the header. Electronic submission is preferred.

If you have not already done so, please contact the Missouri Department of Conservation (Policy Coordination, P. O. Box 180, Jefferson City, MO 65102) for information concerning Missouri Natural Communities and Species of Conservation Concern.
We appreciate your concern for threatened and endangered species. Please feel free to contact our office with questions or for additional information.

John Weber

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:

**Missouri Ecological Services Field Office**
101 Park Deville Drive
Suite A
Columbia, MO 65203-0057
(573) 234-2132

# PROJECT SUMMARY

Project Code: 2023-0107145
Project Name: WVPA Salem Bulk - Valley View 69kV Transmission Line
Project Type: Transmission Line - New Constr - Above Ground
Project Description: This project corridor is to be used to construct a new electrical transmission line between substations.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@37.894333149999994,-90.36989509216528,14z


Counties: Ste. Genevieve County, Missouri

# ENDANGERED SPECIES ACT SPECIES

There is a total of 6 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.

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*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/6329 | Endangered |
| Indiana Bat *Myotis sodalis*<br>There is **final** critical habitat for this species. Your location does not overlap the critical habitat.<br>Species profile: https://ecos.fws.gov/ecp/species/5949<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/D53G4SJSERF2BCEFCKNHYK3IJA/documents/generated/6868.pdf | Endangered |
| Northern Long-eared Bat *Myotis septentrionalis*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9045<br>General project design guidelines:<br>https://ipac.ecosphere.fws.gov/project/D53G4SJSERF2BCEFCKNHYK3IJA/documents/generated/6868.pdf | Endangered |
| Tricolored Bat *Perimyotis subflavus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/10515 | Proposed Endangered |

## AMPHIBIANS

| NAME | STATUS |
|---|---|
| Eastern Hellbender *Cryptobranchus alleganiensis alleganiensis*<br>Population: Missouri DPS<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9039 | Endangered |

## INSECTS

| NAME | STATUS |
|---|---|
| Monarch Butterfly *Danaus plexippus*<br>No critical habitat has been designated for this species.<br>Species profile: https://ecos.fws.gov/ecp/species/9743 | Candidate |

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

# IPAC USER CONTACT INFORMATION

Agency: SCI Engineering Inc.
Name: Justin Loos
Address: 650 Pierce Boulevard
City: O'Fallon
State: IL
Zip: 62269
Email jloos@sciengineering.com
Phone: 6186246969

# Appendix B

# Missouri Department of Conservation

Missouri Department of Conservation's Mission is to
protect and manage the forest, fish, and
wildlife resources of the state and to
facilitate and provide opportunities for all citizens to
use, enjoy and learn about these resources.

## Natural Heritage Review Level Two Report: State Listed Endangered Species and/or Missouri Species/Natural Communities of Conservation Concern

There are records of state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact Missouri Department of Conservation for further coordination.

**Foreword:** Thank you for accessing the Missouri Natural Heritage Review Website developed by the Missouri Department of Conservation with assistance from the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, Missouri Department of Transportation and NatureServe. The purpose of this report is to provide information to federal, state and local agencies, organizations, municipalities, corporations, and consultants regarding sensitive fish, wildlife, plants, natural communities, and habitats to assist in planning, designing, and permitting stages of projects.

### PROJECT INFORMATION

**Project Name and ID Number:** WVPA Salem Bulk - Valley View 69kV Transmission Line #13066
**Project Description:** This project corridor is to be used for construction of a new transmission line between substations.
**Project Type:** Energy Storage, Production and Transfer, Energy Transfer, Power/electric line
**Contact Person:** Justin Loos
**Contact Information:** jloos@sciengineering.com or 618-624-6969

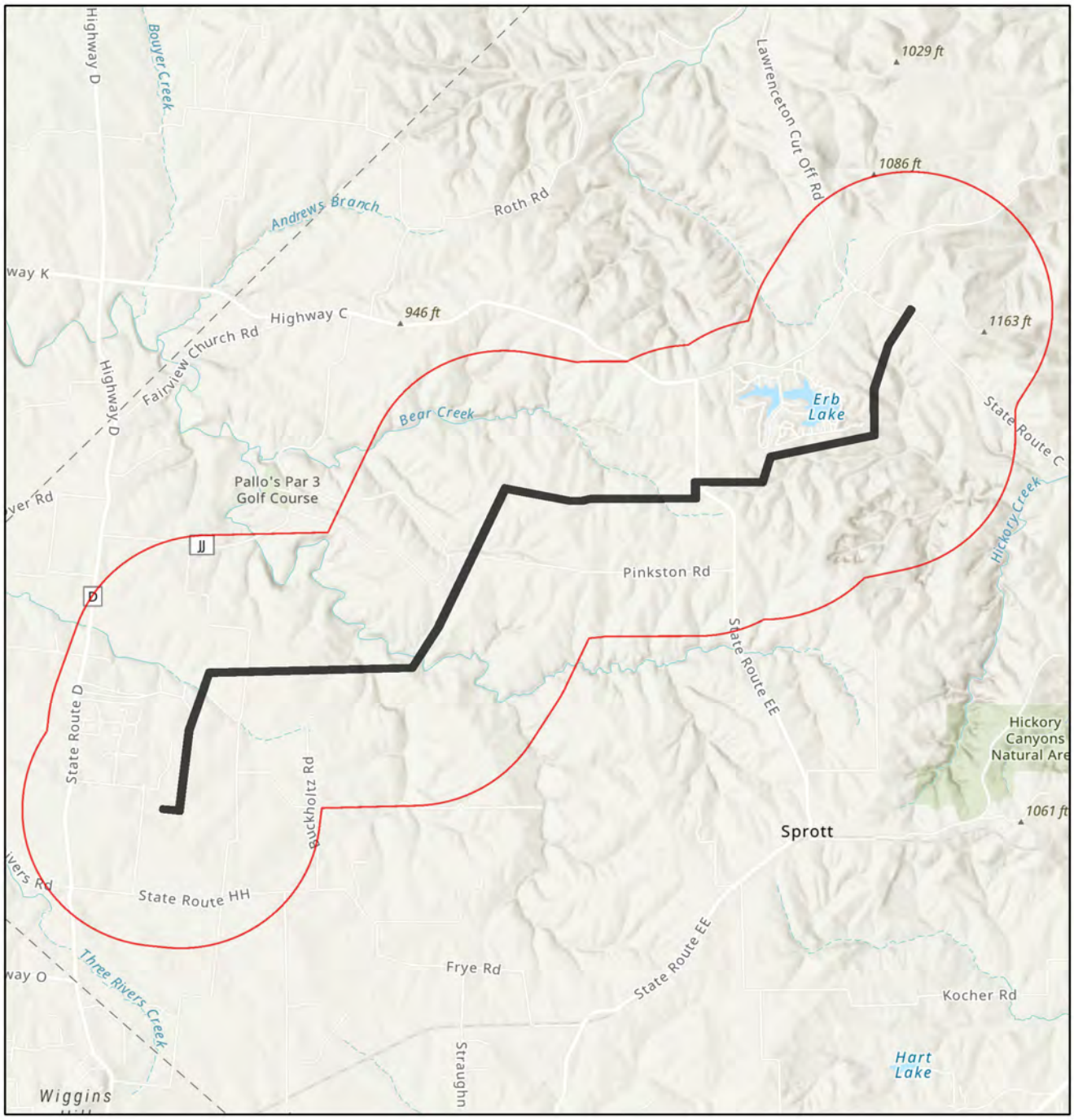
**Disclaimer:** This NATURAL HERITAGE REVIEW REPORT identifies if a species or natural community tracked by the Natural Heritage Program is known to occur within or near the project area submitted, and shares recommendations to avoid or minimize project impacts to sensitive species or natural habitats. Incorporating information from the Natural Heritage Program into project plans is an important step in reducing impacts to Missouri's sensitive natural resources. If an occurrence record is present, or the proposed project might affect federally listed species, the user must contact the Department of Conservation or U.S. Fish and Wildlife Service for more information.

This Natural Heritage Review Report is not a site clearance letter for the project. Rather, it identifies public lands and records of sensitive resources located close to and/or potentially affected by the proposed project. If project plans or location change, this report may no longer be valid. Because land use conditions change and animals move, the existence of an occurrence record does not mean the species/habitat is still present. Therefore, reports include information about records near but not necessarily on the project site. Lack of an occurrence record does not mean that a sensitive species or natural community is not present on or near the project area. On-site verification is the responsibility of the project. However, the Natural Heritage Program is only one reference that should be used to evaluate potential adverse project impacts and additional information (e.g. wetland or soils maps, on-site inspections or surveys) should be considered. Reviewing current landscape and habitat information, and species' biological characteristics would additionally ensure that Missouri Species of Conservation Concern are appropriately identified and addressed in planning efforts.

**U.S. Fish and Wildlife Service – Endangered Species Act (ESA) Coordination:** Lack of a Natural Heritage Program occurrence record for federally listed species in your project area does not mean the species is not present, as the area may never have been surveyed. Presence of a Natural Heritage Program occurrence record does not mean the project will result in negative impacts. This report does not fulfill Endangered Species Act consultation with the U.S. Fish and Wildlife Service (USFWS) for listed species. Direct contact with the USFWS may be necessary to complete consultation and it is required for actions with a federal connection, such as federal funding or a federal permit; direct contact is also required if ESA concurrence is necessary. Visit IPaC: Home (fws.gov) to initiate USFWS Information for Planning and Conservation (IPaC) consultation. Contact the Columbia Missouri Ecological Field Services Office (573-234-2132, or by mail at 101 Park Deville Drive, Suite A, Columbia, MO 65203) for more information.

**Transportation Projects:** If the project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or visit Home Page | Missouri Department of Transportation (modot.org) for additional information on recommendations.

# WVPA Salem Bulk - Valley View 69kV Transmission Line




July 20, 2023

1:64,450

0 0.5 1 2 mi

0 0.75 1.5 3 km

Buffered Project Boundary

Project Boundary

Esri, NASA, NGA, USGS, Missouri Dept. of Conservation, Missouri DNR, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA

**Species or Communities of Conservation Concern within the Area:**

There are records of state-listed Endangered Species, or Missouri Species or Natural Communities of Conservation Concern within or near the defined Project Area. Please contact the Missouri Department of Conservation for further coordination.

Email (preferred): NaturalHeritageReview@mdc.mo.gov
MDC Natural Heritage Review
Science Branch
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182

**Other Special Search Results:**

The project occurs on or near public land, Hickory Canyons NA, please contact MDC.

Your project is near a designated Natural Area . Please contact Missouri Department of Conservation (NaturalHeritageReview@mdc.mo.gov) for further coordination.

**Project Type Recommendations:**
Energy Transfer - Transmission line. Cross-country lines affect fish, forest and wildlife resources, as do activities necessary to the construction, maintenance and repair of the lines. Locating new lines along existing road, pipeline and transmission line right-of-ways, can help avoid and minimize project impacts to wildlife resources. Stream and drainage crossings are concerns; following Clean Water Act Section 404 and 401 conditions, if required, will also help to reduce impacts to streams, wetland and water quality. Every effort should be made to avoid erosion, silt introduction, petroleum or chemical pollution, and disruption or realignment of stream banks and beds. Please visit Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams (mo.gov). Revegetation is an important part of managing utility corridors, and it can have significant resource impacts depending on the practices followed. Revegetation of disturbed areas is recommended to minimize erosion, as is restoration with native plant species compatible with the local landscape and wildlife needs. Annuals like ryegrass may be combined with native perennials for quicker green-up. Avoid aggressive exotic perennials such as crown vetch and sericea lespedeza. Maintenance of ground cover in utility corridors can have significant implications for sensitive resources. Native plant species typically require low maintenance over the long term, and provide more benefits to native wildlife. Utility corridors can provide wildlife travel corridors, food sources and types of low-growing plant diversity sometimes rare in adjoining land. Mowing and maintenance schedules should consider nesting seasons, and diversity in plant composition.

**Project Location and/or Species Recommendations:**

**Endangered Species Act Coordination - If this project has the potential to alter habitat (e.g. tree removal, projects in karst habitat) or cause direct mortality of bats, please coordinate directly with U.S. Fish and Wildlife Service (Ecological Services, 101 Park Deville Drive, Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132 Ext. 100 for Ecological Services) for further coordination under the Endangered Species Act. Indiana bats** *(Myotis sodalis*, federal- and state-listed endangered) and **Northern long-eared bats** (*Myotis septentrionalis,* federal-listed threatened) may occur near the project area. Both of these species of bats hibernate during winter months in caves and mines. During the summer months, they roost and raise young under the bark of trees in wooded areas, often riparian forests and upland forests near perennial streams. During project activities, avoid degrading stream quality and where possible leave snags standing and preserve mature forest canopy. Do not enter caves known to harbor Indiana bats or Northern long-eared bats, especially from September to April.

**Gray Bat**: The submitted project location is within the range of the Gray Myotis (i.e., Gray Bat) in Missouri. Depending on habitat conditions of your project's location, Gray Myotis (*Myotis grisescens*, federal and state-listed endangered) could occur within the project area, as they forage over streams, rivers, lakes, and reservoirs. Avoid entry or disturbance of any cave inhabited by Gray Myotis and when possible retain forest vegetation along the stream and from the cave opening to the stream. Please see Best Management Practices for Construction and Development Projects Gray bat (mo.gov).

**Karst**: This county has known karst geologic features (e.g., caves, springs, and sinkholes, all characterized by subterranean water movement). Few karst features are recorded in Natural Heritage records, and ones not noted here may be encountered at the project site or affected by the project. Cave fauna (many of which are Species of Conservation Concern) are influenced by changes to water quality; please check your project site for any karst features and make every effort to protect groundwater in the project area. Additional information and specific recommendations are available at Management Recommendations for Construction and Development Projects Affecting Missouri Karst Habitat (mo.gov).

**Invasive exotic species** are a significant issue for fish, wildlife and agriculture in Missouri. Seeds, eggs, and larvae may be moved to new sites on boats or construction equipment. Please inspect and clean equipment thoroughly before moving between project sites. See Managing Invasive Species in Your Community | Missouri Department of Conservation (mo.gov) for more information.

- Remove any mud, soil, trash, plants or animals from equipment before leaving any water body or work area.
- Drain water from boats and machinery that have operated in water, checking motor cavities, live-well, bilge and transom wells, tracks, buckets, and any other water reservoirs.
- When possible, wash and rinse equipment thoroughly with hard spray or HOT water (>140° F, typically available at do-it-yourself car wash sites), and dry in the hot sun before using again.

**Streams and Wetlands – Clean Water Act Permits:** Streams and wetlands in the project area should be protected from activities that degrade habitat conditions. For example, soil erosion, water pollution, placement of fill, dredging, in-stream activities, and riparian corridor removal, can modify or diminish aquatic habitats. Streams and wetlands may be protected under the Clean Water Act and require a permit for any activities that result in fill or other modifications to the site. Conditions provided within the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permit (Kansas City District Regulatory Branch (army.mil)) and the Missouri Department of Natural Resources (DNR) issued Clean Water Act Section 401 Water Quality Certification (Section 401 Water Quality Certification | Missouri Department of Natural Resources (mo.gov) ), if required, should help minimize impacts to the aquatic organisms and aquatic habitat within the area. Depending on your project type, additional permits may be required by the Missouri Department of Natural Resources, such as permits for stormwater, wastewater treatment facilities, and confined animal feeding operations. Visit Wastewater Permits | Missouri Department of Natural Resources (mo.gov) for more information on DNR permits. Visit both the USACE and DNR for more information on Clean Water Act permitting.

**For further coordination with the Missouri Department of Conservation and the U.S. Fish and Wildlife Services, please see the contact information below:**

Email (preferred): NaturalHeritageReview@mdc.mo.gov
MDC Natural Heritage Review
Science Branch
P.O. Box 180
Jefferson City, MO
65102-0180
Phone: 573-522-4115 ext. 3182

U.S. Fish and Wildlife Service
Ecological Service
101 Park Deville Drive
Suite A
Columbia, MO
65203-0007
Phone: 573-234-2132

**Miscellaneous Information**

FEDERAL Concerns are species/habitats protected under the Federal Endangered Species Act and that have been known near enough to the project site to warrant consideration. For these, project managers must contact the U.S. Fish and Wildlife Service Ecological Services (101 Park Deville Drive Suite A, Columbia, Missouri 65203-0007; Phone 573-234-2132; Fax 573-234-2181) for consultation.

STATE Concerns are species/habitats known to exist near enough to the project site to warrant concern and that are protected under the Wildlife Code of Missouri (RSMo 3 CSR 1 0). "State Endangered Status" is determined by the Missouri Conservation Commission under constitutional authority, with requirements expressed in the Missouri Wildlife Code, rule 3CSR 1 0-4.111. Species tracked by the Natural Heritage Program have a "State Rank" which is a numeric rank of relative rarity. Species tracked by this program and all native Missouri wildlife are protected under rule 3CSR 10-4.110 General Provisions of the Wildlife Code.

See Missouri Species and Communities of Conservation Concern Checklist (mo.gov) for a complete list of species and communities of conservation concern. Detailed information about the animals and some plants mentioned may be accessed at Mofwis Search Results. Please contact the Missouri Department of Conservation to request printed copies of any materials linked in this document.

Federal Register
Vol. 90, No. 18
Wednesday, January 29, 2025

# Presidential Documents

**Title 3—**

## The President

**Executive Order 14156 of January 20, 2025**

## Declaring a National Energy Emergency

By the authority vested in me as President by the Constitution and the laws of the United States of America, including the National Emergencies Act (50 U.S.C. 1601 *et seq.*) (''NEA''), and section 301 of title 3, United States Code, it is hereby ordered:

**Section 1**. *Purpose.* The energy and critical minerals (''energy'') identification, leasing, development, production, transportation, refining, and generation capacity of the United States are all far too inadequate to meet our Nation's needs. We need a reliable, diversified, and affordable supply of energy to drive our Nation's manufacturing, transportation, agriculture, and defense industries, and to sustain the basics of modern life and military preparedness. Caused by the harmful and shortsighted policies of the previous administration, our Nation's inadequate energy supply and infrastructure causes and makes worse the high energy prices that devastate Americans, particularly those living on low- and fixed-incomes.

This active threat to the American people from high energy prices is exacerbated by our Nation's diminished capacity to insulate itself from hostile foreign actors. Energy security is an increasingly crucial theater of global competition. In an effort to harm the American people, hostile state and non-state foreign actors have targeted our domestic energy infrastructure, weaponized our reliance on foreign energy, and abused their ability to cause dramatic swings within international commodity markets. An affordable and reliable domestic supply of energy is a fundamental requirement for the national and economic security of any nation.

The integrity and expansion of our Nation's energy infrastructure—from coast to coast—is an immediate and pressing priority for the protection of the United States' national and economic security. It is imperative that the Federal government puts the physical and economic wellbeing of the American people first.

Moreover, the United States has the potential to use its unrealized energy resources domestically, and to sell to international allies and partners a reliable, diversified, and affordable supply of energy. This would create jobs and economic prosperity for Americans forgotten in the present economy, improve the United States' trade balance, help our country compete with hostile foreign powers, strengthen relations with allies and partners, and support international peace and security. Accordingly, our Nation's dangerous energy situation inflicts unnecessary and perilous constraints on our foreign policy.

The policies of the previous administration have driven our Nation into a national emergency, where a precariously inadequate and intermittent energy supply, and an increasingly unreliable grid, require swift and decisive action. Without immediate remedy, this situation will dramatically deteriorate in the near future due to a high demand for energy and natural resources to power the next generation of technology. The United States' ability to remain at the forefront of technological innovation depends on a reliable supply of energy and the integrity of our Nation's electrical grid. Our Nation's current inadequate development of domestic energy resources leaves us vulnerable to hostile foreign actors and poses an imminent and growing threat to the United States' prosperity and national security.

These numerous problems are most pronounced in our Nation's Northeast and West Coast, where dangerous State and local policies jeopardize our Nation's core national defense and security needs, and devastate the prosperity of not only local residents but the entire United States population. The United States' insufficient energy production, transportation, refining, and generation constitutes an unusual and extraordinary threat to our Nation's economy, national security, and foreign policy. In light of these findings, I hereby declare a national emergency.

**Sec. 2**. *Emergency Approvals.* (a) The heads of executive departments and agencies (''agencies'') shall identify and exercise any lawful emergency authorities available to them, as well as all other lawful authorities they may possess, to facilitate the identification, leasing, siting, production, transportation, refining, and generation of domestic energy resources, including, but not limited to, on Federal lands. If an agency assesses that use of either Federal eminent domain authorities or authorities afforded under the Defense Production Act (Public Law 81–774, 50 U.S.C. 4501 *et seq.*) are necessary to achieve this objective, the agency shall submit recommendations for a course of action to the President, through the Assistant to the President for National Security Affairs.

(b) Consistent with 42 U.S.C. 7545(c)(4)(C)(ii)(III), the Administrator of the Environmental Protection Agency, after consultation with, and concurrence by, the Secretary of Energy, shall consider issuing emergency fuel waivers to allow the year-round sale of E15 gasoline to meet any projected temporary shortfalls in the supply of gasoline across the Nation.

**Sec. 3**. *Expediting the Delivery of Energy Infrastructure.* (a) To facilitate the Nation's energy supply, agencies shall identify and use all relevant lawful emergency and other authorities available to them to expedite the completion of all authorized and appropriated infrastructure, energy, environmental, and natural resources projects that are within the identified authority of each of the Secretaries to perform or to advance.

(b) To protect the collective national and economic security of the United States, agencies shall identify and use all lawful emergency or other authorities available to them to facilitate the supply, refining, and transportation of energy in and through the West Coast of the United States, Northeast of the United States, and Alaska.

(c) The Secretaries shall provide such reports regarding activities under this section as may be requested by the Assistant to the President for Economic Policy.

**Sec. 4**. *Emergency Regulations and Nationwide Permits Under the Clean Water Act (CWA) and Other Statutes Administered by the Army Corps of Engineers.* (a) Within 30 days from the date of this order, the heads of all agencies, as well as the Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works shall:

(i) identify planned or potential actions to facilitate the Nation's energy supply that may be subject to emergency treatment pursuant to the regulations and nationwide permits promulgated by the Corps, or jointly by the Corps and EPA, pursuant to section 404 of the Clean Water Act, 33 U.S.C. 1344, section 10 of the Rivers and Harbors Act of March 3, 1899, 33 U.S.C. 403, and section 103 of the Marine Protection Research and Sanctuaries Act of 1972, 33 U.S.C. 1413 (collectively, the ''emergency Army Corps permitting provisions''); and

(ii) shall provide a summary report, listing such actions, to the Director of the Office of Management and Budget (''OMB''); the Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works; the Assistant to the President for Economic Policy; and the Chairman of the Council on Environmental Quality (CEQ). Such report may be combined, as appropriate, with any other reports required by this order.

(b) Agencies are directed to use, to the fullest extent possible and consistent with applicable law, the emergency Army Corps permitting provisions to facilitate the Nation's energy supply.

(c) Within 30 days following the submission of the initial summary report described in subsection (a)(ii) of this section, each department and agency shall provide a status report to the OMB Director; the Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works; the Director of the National Economic Council; and the Chairman of the CEQ. Each such report shall list actions taken within subsection (a)(i) of this section, shall list the status of any previously reported planned or potential actions, and shall list any new planned or potential actions that fall within subsection (a)(i). Such status reports shall thereafter be provided to these officials at least every 30 days for the duration of the national emergency and may be combined, as appropriate, with any other reports required by this order.

(d) The Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works, shall be available to consult promptly with agencies and to take other prompt and appropriate action concerning the application of the emergency Army Corps permitting provisions. The Administrator of the EPA shall provide prompt cooperation to the Secretary of the Army and to agencies in connection with the discharge of the responsibilities described in this section.

**Sec. 5**. *Endangered Species Act (ESA) Emergency Consultation Regulations.* (a) No later than 30 days from the date of this order, the heads of all agencies tasked in this order shall:

(i) identify planned or potential actions to facilitate the Nation's energy supply that may be subject to the regulation on consultations in emergencies, 50 CFR 402.05, promulgated by the Secretary of the Interior and the Secretary of Commerce pursuant to the Endangered Species Act (''ESA''), 16 U.S.C. 1531 *et seq.;* and

(ii) provide a summary report, listing such actions, to the Secretary of the Interior, the Secretary of Commerce, the OMB Director, the Director of the National Economic Council, and the Chairman of CEQ. Such report may be combined, as appropriate, with any other reports required by this order.

(b) Agencies are directed to use, to the maximum extent permissible under applicable law, the ESA regulation on consultations in emergencies, to facilitate the Nation's energy supply.

(c) Within 30 days following the submission of the initial summary report described in subsection (a)(ii) of this section, the head of each agency shall provide a status report to the Secretary of the Interior, the Secretary of Commerce, the OMB Director, the Director of the National Economic Council, and the Chairman of CEQ. Each such report shall list actions taken within the categories described in subsection (a)(i) of this section, the status of any previously reported planned or potential actions, and any new planned or potential actions within these categories. Such status reports shall thereafter be provided to these officials at least every 30 days for the duration of the national emergency and may be combined, as appropriate, with any other reports required by this order. The OMB Director may grant discretionary exemptions from this reporting requirement.

(d) The Secretary of the Interior shall ensure that the Director of the Fish and Wildlife Service, or the Director's authorized representative, is available to consult promptly with agencies and to take other prompt and appropriate action concerning the application of the ESA's emergency regulations. The Secretary of Commerce shall ensure that the Assistant Administrator for Fisheries for the National Marine Fisheries Service, or the Assistant Administrator's authorized representative, is available for such consultation and to take such other action.

**Sec. 6**. *Convening the Endangered Species Act Committee.* (a) In acting as Chairman of the Endangered Species Act Committee, the Secretary of the Interior shall convene the Endangered Species Act Committee not less than quarterly, unless otherwise required by law, to review and consider any lawful applications submitted by an agency, the Governor of a State,

or any applicant for a permit or license who submits for exemption from obligations imposed by Section 7 of the ESA.

(b) To the extent practicable under the law, the Secretary of the Interior shall ensure a prompt and efficient review of all submissions described in subsection (a) of this section, to include identification of any legal deficiencies, in order to ensure an initial determination within 20 days of receipt and the ability to convene the Endangered Species Act Committee to resolve the submission within 140 days of such initial determination of eligibility.

(c) In the event that the committee has no pending applications for review, the committee or its designees shall nonetheless convene to identify obstacles to domestic energy infrastructure specifically deriving from implementation of the ESA or the Marine Mammal Protection Act, to include regulatory reform efforts, species listings, and other related matters with the aim of developing procedural, regulatory, and interagency improvements.

**Sec. 7**. *Coordinated Infrastructure Assistance.* (a) In collaboration with the Secretaries of Interior and Energy, the Secretary of Defense shall conduct an assessment of the Department of Defense's ability to acquire and transport the energy, electricity, or fuels needed to protect the homeland and to conduct operations abroad, and, within 60 days, shall submit this assessment to the Assistant to the President for National Security Affairs. This assessment shall identify specific vulnerabilities, including, but not limited to, potentially insufficient transportation and refining infrastructure across the Nation, with a focus on such vulnerabilities within the Northeast and West Coast regions of the United States. The assessment shall also identify and recommend the requisite authorities and resources to remedy such vulnerabilities, consistent with applicable law.

(b) In accordance with section 301 of the National Emergencies Act (50 U.S.C. 1631), the construction authority provided in section 2808 of title 10, United States Code, is invoked and made available, according to its terms, to the Secretary of the Army, acting through the Assistant Secretary of the Army for Civil Works, to address any vulnerabilities identified in the assessment mandated by subsection (a). Any such recommended actions shall be submitted to the President for review, through the Assistant to the President for National Security Affairs and the Assistant to the President for Economic Policy.

**Sec. 8**. *Definitions.* For purposes of this order, the following definitions shall apply:

(a) The term ''energy'' or ''energy resources'' means crude oil, natural gas, lease condensates, natural gas liquids, refined petroleum products, uranium, coal, biofuels, geothermal heat, the kinetic movement of flowing water, and critical minerals, as defined by 30 U.S.C. 1606 (a)(3).

(b) The term ''production'' means the extraction or creation of energy.

(c) The term ''transportation'' means the physical movement of energy, including through, but not limited to, pipelines.

(d) The term ''refining'' means the physical or chemical change of energy into a form that can be used by consumers or users, including, but not limited to, the creation of gasoline, diesel, ethanol, aviation fuel, or the beneficiation, enrichment, or purification of minerals.

(e) The term ''generation'' means the use of energy to produce electricity or thermal power and the transmission of electricity from its site of generation.

(f) The term ''energy supply'' means the production, transportation, refining, and generation of energy.

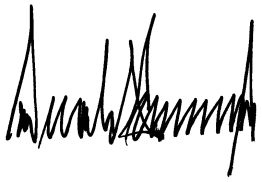
**Sec. 9**. *General Provisions.* (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of OMB relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.



THE WHITE HOUSE,
*January 20, 2025.*

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