

# Conservation Plan

## ComEd L15508 Transmission Line Rebuild Project

Lee and Whiteside Counties, Illinois

Prepared for:

Commonwealth Edison Company  
One Lincoln Center  
Oakbrook Terrace, IL 60181

**ComEd**®

An Exelon Company

**powering lives**

February 11, 2020  
*Revised March 27, 2020*

---

- 1. Likely Impacts ..... 1**
  - A. Area to be Affected..... 1
  - B. Biological Data on Affected Species ..... 3
    - i. Blanding’s Turtle ..... 3
    - ii. Ornate Box Turtle..... 4
    - iii. Plains Hog-nosed Snake..... 5
    - iv. Regal Fritillary..... 5
  - C. Description of Project Activities ..... 6
    - i. Practices to be Used..... 6
    - ii. Timeline of Activities ..... 7
    - iii. Permitting Reviews ..... 8
  - D. Adverse Effects on Listed Species ..... 8
    - i. Blanding’s Turtle ..... 8
    - ii. Ornate Box Turtle..... 8
    - iii. Plains Hog-nosed Snake..... 9
    - iv. Regal Fritillary..... 9
- 2. Minimization Measures, Mitigation, and Funding .....12**
  - A. Number of Individuals Taken and Amount of Habitat Affected ..... 12
  - B. Plans for Management of the Area ..... 12
  - C. Measures to Avoid, Minimize, and Mitigate Effects ..... 12
    - i. Measures to Avoid Effects ..... 12
    - ii. Measures to Minimize Effects ..... 12
    - iii. Mitigation ..... 14
  - D. Monitoring ..... 14
  - E. Adaptive Management Practices ..... 14
  - F. Funding to Support Minimization and Mitigation ..... 15
- 3. Alternative Actions .....15**
  - A. Preferred Alternative..... 15
  - B. No Action Alternative ..... 15
  - C. Potential Reroute Alternatives ..... 15
- 4. Likelihood of Survival of Listed Species .....16**
  - A. Blanding’s Turtle..... 16

---

B. Ornate Box Turtle .....	16
C. Plains Hog-nosed Snake .....	17
D. Regal Fritillary .....	17
<b>5. References .....</b>	<b>18</b>

**List of Figures**

- Figure 1 – Project Overview
- Figure 2 – Action Area
- Figure 3 – Environmentally Sensitive Areas

**List of Appendices**

- Appendix A – Land Ownership or Control
- Appendix B – Implementing Agreement

**Illinois Department of Natural Resources**  
**CONSERVATION PLAN**  
*(Application for an Incidental Take Authorization)*  
Per 520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080

**150-day minimum required for public review, biological and legal analysis, and permitting**

PROJECT APPLICANT: **Commonwealth Edison (ComEd)**

PROJECT NAME: **ComEd L15508 Transmission Line Rebuild Project**

COUNTY: **Lee & Whiteside**

AREA OF IMPACT (acreage): **7.12 acres**

## **1. Likely Impacts**

### **A. Area to be Affected**

Commonwealth Edison (ComEd) is proposing to rebuild an existing 138-kilovolt (kV) transmission line, L15508, in Lee and Whiteside Counties, Illinois (the Project; Figure 1). The line originates adjacent to the recently rebuilt L13304 at a new switchyard recently constructed just north of Jersey Road and extends northeast along existing ComEd right-of-way (ROW) approximately 9 miles, then turns due north along existing ROW approximately 4 miles to a switch located at Structure 0265D. Specifically, the Project is located in the following townships:

- Township, 19N, Range 7E, Sections 13, and 24 and Range 8E, Sections 4-5, 7-8, and 18;
- Township 20N, Range 8E, Sections 1, 12, 13, 23-27, and 33-34; and
- Township 21N Range 8E, Section 36 (Figure 1).

The action area for this Conservation Plan is defined as the area within the existing L15508 ROW between Jersey Road and Structure 204 (Figure 2), as well as temporary off-ROW access routes (Figures 2 and 3). The action area represents the larger habitat context for the environmentally sensitive areas and extends farther than the area comprising suitable habitat for listed species or where the risk of take is present. At this time, nine off-ROW access routes have been identified as possible options; however, it is possible that not all will be needed or used. This Conservation Plan addresses the off-ROW access routes both individually and in total (Table 1). The action area is approximately 50.0 acres in size, of which approximately 7.4 acres (14.80%) appears to be used to produce row crops (Homer *et al.* 2015).

This Conservation Plan seeks incidental take authorization for four state-listed species. Four locations within the action area and associated off-ROW access routes have been identified as environmentally sensitive areas where these species may occur:

- Environmentally Sensitive Area 1 includes the ROW from the northern border of the Hahnman Sand Prairie Nature Preserve Illinois Nature Preserves Commission (INPC) Site southwest of Structure 190 and extends northeast up until its intersection with railroad ROW southwest of Structure 194. Four off-ROW access options for Environmentally Sensitive Area 1 have been identified. Throughout the Project, all access routes are expected to be 14 feet in width. The first off-ROW access route (ORA-ESA1-1) originates at Jersey Road, traversing north through

agricultural lands outside of Environmentally Sensitive Area 1, and then is present within off-ROW environmentally sensitive habitat between Structures 190 and 191 (Figure 3). In total, 831 feet (0.27 acre) of ORA-ESA1-1 is within Environmentally Sensitive Area 1. The second off-ROW access route (ORA-ESA1-2) originates on the ROW southwest of structure 193, travels around hilly terrain and uses the existing L13304/L7411 transmission line ROW to connect to the L15508 ROW north of structure 191A (Figure 3). The entire length of 2,381 feet (0.77 acre) of ORA-ESA1-2 is within Environmentally Sensitive Area 1. The third off-ROW access route (ORA-ESA1-3) connects to ORA-ESA1-2 and travels southeast to adjoin the ROW adjacent to structure 192, facilitating avoidance of the broomrape population associated with structure 192 (see Section 2.C.ii). The entire length of 157 feet (0.05 acre) of ORA-ESA1-3 is within Environmentally Sensitive Area 1. The final off-ROW access route associated with Environmentally Sensitive Area 1 (ORA-ESA1-4) originates from Hahnman Road and proceeds along fencerow and railroad tracks until intersecting the ROW southwest of Structure 194 (Figure 3). The entire length of 1,739 feet (0.56 acre) of ORA-ESA1-4 is within Environmentally Sensitive Area 1. In addition, 2,265 feet (0.73 acre) of access along the ROW is within Environmentally Sensitive Area 1. Further, a 12,000 square foot work pad will be installed at each structure. Since five structures are within Environmentally Sensitive Area 1, 60,000 square feet (1.38 acres) are expected to be temporarily impacted by work pads. In total, if all four off-ROW access routes are used in addition to the planned access, work pads, and turn arounds within the ROW, we estimate that 3.75 acres of habitat will be temporarily impacted within Environmentally Sensitive Area 1 (Table 1).

- Environmentally Sensitive Area 2 includes an area of degraded remnant sand prairie between Structures 194 and 195. Access to Environmentally Sensitive Area 2 will occur from Hahnman Road and traverse southwest through agricultural cropland. No off-ROW access will be used within Environmentally Sensitive Area 2. A length of 356 feet (0.11 acre) of access within Environmentally Sensitive Area 2 will be used. No structures are located within Environmentally Sensitive Area 2. In total, we estimate that 0.11 acres of habitat will be temporarily impacted within Environmentally Sensitive Area 2 (Table 1).
- Environmentally Sensitive Area 3 encompasses ROW within the IDNR Sand Prairie Habitat Area Illinois Natural Areas Inventory (INAI) site located between Structure 196 – northeast of structure 200 (Figure 3). Five off-ROW access options within Environmentally Sensitive Area 3 have been identified, each expected to be 14 feet in width. The first (ORA-ESA3-1) originates at County Line Road, connecting to environmentally sensitive ROW to the east. The entire length of 89 feet (0.03 acre) of ORA-ESA3-1 is within Environmentally Sensitive Area 3. The second off-ROW access route (ORA-ESA3-2) originates from Hahnman Road and travels northwest to intersect with the ROW. The entire length of 262 feet (0.08 acre) is within Environmentally Sensitive Area 3. The third off-ROW access route (ORA-ESA3-3) originates north of the Sand Prairie Habitat Area and traverses southeast to connect to ROW adjacent to structure 198. The entire length of 1,610 feet (0.52 acre) is within Environmentally Sensitive Area 3. The fourth off-ROW access route associated with Environmentally Sensitive Area 3 (ORA-ESA3-4) connects ROW south of structure 198 and reconnects south of structure 199 (Figure 3). The entire length of 910 feet (0.29 acre) is within Environmentally Sensitive Area 3. The final off-ROW access route associated with Environmentally Sensitive Area 3 (ORA-ESA3-5) is located north of and just outside of environmentally sensitive habitat and is not included in our calculations of impacts. Three access routes, ORA-ESA3-2, ORA-ESA3-3, and ORA-ESA3-4 are within the state-owned Sand Prairie Habitat Area. The Project team is still in the process of discussing ComEd's permissions for use of these off-ROW access routes with IDNR. A length of 1,359 feet (0.44 acre) of access along the ROW will be used within Environmentally Sensitive Area 3. Further, a 12,000 square foot (0.28 acre) work pad will be installed at structure 196, and four 15,000 square foot (1.38 acres) work pads and turnarounds will be installed at structures 197 – 200. In total, if all off-ROW access routes are used in addition to planned access, work pads, and turn arounds within the ROW, we estimate that 3.01 acres of habitat will be temporarily impacted within Environmentally Sensitive Area 3 (Table 1).
- Environmentally Sensitive Area 4 includes an area of old field and degraded remnant sand prairie between Structures 201 and 202 (Figure 3). Access to Environmentally Sensitive Area 4 will occur along the ROW from Environmentally Sensitive Area 3 and through agricultural cropland to the

southwest. A length of 761 feet (0.25 acre) of access along the ROW is within Environmentally Sensitive Area 4. No structures are located within Environmentally Sensitive Area 4. In total, we estimate that 0.25 acre of habitat will be temporarily impacted within Environmentally Sensitive Area 4 (Table 1).

Appendix A includes a table summary indicating ownership or control of the affected properties in the Environmentally Sensitive Areas. ComEd has easement agreements for the transmission line ROW with each of the landowners. The terms of the individual easements vary.

## B. Biological Data on Affected Species

This Conservation Plan has been prepared in accordance with the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 and 17 Ill. Adm. Code 1080) in support of an Incidental Take Authorization (ITA) application to the IDNR. The purpose of this Conservation Plan is to review the proposed Project in sufficient detail to determine to what extent the proposed action may result in “incidental take” of the following state-listed species:

- Blanding’s turtle (*Emydoidea blandingii*) – Endangered
- Ornate box turtle (*Terrapene ornata*) – Threatened
- Plains hog-nosed snake (*Heterodon nasicus*) – Threatened
- Regal fritillary (*Speyeria idalia*) – Threatened

A desktop and field habitat assessment were performed for the action area. Prior to the field investigation, several data sources were consulted to identify areas of suitable habitat for each of the four state-listed species included in this Conservation Plan. These data sources included:

- USGS 1:24,000 Scale Topographic Maps (Figure 1)
- Recent aerial photography (Figure 2 and 3)
- Natural Resources Conservation Service (NRCS) soils data for Lee and Whiteside Counties, Illinois (Figure 3)

A site visit was made to the action area on August 30, 2019 to confirm the presence of suitable habitat for the four state-listed species within the existing ROW between Structures 189-204. Given the predominance of agricultural fields north of Foley Road, no additional site visits were made within the remaining portions of the project (Figure 3).

### i. Blanding’s Turtle

#### Species Description

Blanding’s turtles are medium-to-large aquatic turtles with a distinctive yellow chin and throat, and a smooth, elongated blue or black carapace. Blanding’s turtles have a hinged, bright-yellow plastron with large, dark, asymmetrically arranged blotches on the posterior lateral third of each scute. Males and females are similar in appearance (NatureServe 2005).

Blanding’s turtles forage omnivorously on crayfish, insects, earthworms, minnows, and seeds within their 0.6 hectare (1.5 acre)-sized home range (Graham & Doyle 1977; Kofron & Schreiber 1985; Rowe & Moll 1991; Rowe 1992; Wisconsin DNR 2019). Breeding may occur throughout the active season, but most commonly occurs during the spring (Harding 1997; Wisconsin DNR 2017). Nesting activities occur between mid-May and early July; hatchlings incubate and emerge between August and October (Vogt 1981; Harding 1997). Overwintering for both juveniles and adults occurs from November through March.

### Species Status in the Project Area

IDNR records indicate that at least one occurrence record for this species are known from Lee County (EcoCAT ID#1909027). The species is known to occur northeast of the intersection of Hahnman Road and County Line Road.

### Habitat Requirements

Blanding's turtles are aquatic but may be found far from water and may use many habitats throughout the year. During the active season, Blanding's turtles typically use shallow, slow-moving and well-vegetated waters, including marshes, mesic prairies, slow-moving rivers, shallow lakes or ponds, and wet meadows associated with any of these habitats (Vogt 1981; Oldfield & Moriarty 1994; Harding 1997; Wisconsin DNR 2017). When overwintering, Blanding's turtles require deeper water, at least three feet at the deepest point (Ross & Anderson 1990). Nesting activities occur in open areas with sandy soils, usually within 900 feet of a wetland or water body (Ross & Anderson 1990).

### Habitat Assessment

During the site visit on August 30, 2019, two wetlands were determined to have suitable habitat for Blanding's turtle. In addition, upland areas in sandy soils within 900 feet of the wetlands were considered suitable nesting habitat. Based on this, it was determined that 13.53 acres of suitable habitat occur within the Environmentally Sensitive Areas and all proposed access routes (Figure 3). Approximately 10.77 acres of suitable Blanding's turtle habitat overlap with ornate box turtle, plains hog-nosed snake, and regal fritillary habitat (see below); the remaining 2.76 acres are comprised of wetland habitat not considered suitable for the other three state-listed species.

## **ii. Ornate Box Turtle**

### Species Description

Ornate box turtles are small terrestrial turtles with a high-domed, round or oval carapace with a dark brown color and yellow lines on each scale that radiate downward and forward. The strongly hinged plastron is similarly marked and may be closed completely. Males may be distinguished from females by the presence of an inwardly facing first toe on the hind legs, a concave plastron, and red eyes (Ernst and Lovich 2009).

Ornate box turtles are diurnal and their daily activity cycle, as described by Ernst and Lovich (2009), consists of emerging from their night burrow (or form) and basking for a short time before beginning to forage. The turtles eat insects such as beetles, caterpillars, and grasshoppers which account for approximately 90% of their diet, as well as a variety of plants and berries (Ernst and Lovich 2009). Typically, foraging stops by late morning and the turtles seek shelter in day burrows or other shady spots, where they remain until mid- to late afternoon when they begin to forage again. Legler (1960) found the home range of an individual turtle to be approximately two hectares (5 acres). Females lay one or more clutches of eggs in May through June and abandon their nests to let the eggs incubate for approximately 80-90 days. Hatchlings emerge in the fall or may overwinter depending on conditions. In mid- to late October, the ornate box turtle burrows two to three feet into the ground to overwinter. They remain in their overwintering burrow until they emerge in late April or early May.

### Species Status in the Project Area

IDNR records indicate that at least one occurrence record for this species is known from Whiteside County (EcoCAT ID#1909027). This species is known to occur within the Hahnman Sand Prairie Nature Preserve.

### Habitat Requirements

Ornate box turtles are primarily a prairie species, but also inhabit pastures, open woodland areas, and agricultural fields. Ornate box turtles are restricted to areas with soils that allow for easy burrowing. Legler (1960) reported that ornate box turtles prefer bare, well-drained, sloping areas protected from erosion by upslope clumps of rocks or sod for nesting. Preferred sites are locations well suited to basking and burrowing, as well as being protected from the wind (Ernst and Lovich 2009).

### Habitat Assessment

The extent of suitable ornate box turtle habitat within the action area was based on the following assumptions that ornate box turtles:

1. Are restricted to areas of nearly pure sand.
2. Use open canopy habitats and do not regularly utilize closed canopy forest or wetlands.
3. Prefer non-cropped grassland habitat over actively cropped areas despite the fact they may use actively cropped farmland at times throughout the year.

During the August 30, 2019 site visit, biologists identified habitat types associated with sandy soils that are suitable to the ornate box turtle. These habitat types include sand prairies of various quality and old field conditions. Based on a desktop analysis of NRCS soil survey data, aerial photos, and landcover, as well as observations from the field site visit, it was determined that approximately 29.17 acres of suitable habitat occur within the Environmentally Sensitive Areas and all proposed access routes (Figure 3). An additional 2.39 acres of suitable habitat occur within the Hahnaman Sand Prairie.

## **iii. Plains Hog-nosed Snake**

### Species Description

The plains hog-nosed snake is a medium sized, stout bodied snake up to 24 inches in total length. It has a grayish brown or light olive green back covered with 35-40 dark blotches. A sharply upturned scale at the tip of the nose is used for digging and burrowing. The belly is white to yellowish, and it is predominantly black on the underside of the tail. The scales are keeled, and the anal plate is divided. A diagonal bar lying between the eyes extends downward behind each eye to the corner of the mouth.

The plains hog-nosed snake mates in the spring. In July they lay a clutch of eight to ten eggs which then hatch in August or September. The plains hog-nosed snake feeds on toads and other amphibians, reptiles and their eggs, birds, and small mammals (Phillips *et al.* 1999; Ernst and Ernst 2003). When frightened, the snake will widen its neck, hiss, and sometimes strike, then roll onto its back and feign death.

### Species Status in the Project Area

IDNR records indicate that at least one occurrence record for this species is known from Whiteside County (EcoCAT ID#1909027). The INHD indicates this species is known to occur within the Hahnaman Sand Prairie Nature Preserve.

### Habitat Requirements

The plains hog-nosed snake is a prairie or savanna species, preferring grasslands with well drained sandy or gravelly soils for burrowing (Ernst and Ernst 2003). In Illinois, it is most often observed crossing sandy roads within or near brushy or weedy sand prairie remnants (Phillips *et al.* 1999).

### Habitat Assessment

Based on this species' habitat requirements, suitable plains hog-nosed snake habitat overlaps entirely with the ornate box turtle habitat described above. (Figure 3).

## **iv. Regal Fritillary**

### Species Description

The regal fritillary is a large butterfly with a wingspan of 2.7 to 4.2 inches. The forewing dorsal is orange with black marks; the margins are black with small white markings at the edge. The hind wing dorsal is black with a row of postmedian white spots. The submarginal row has orange spots in the male and white spots in the female.

The regal fritillary has one brood, with flight records from mid-June through mid-September. Adult males emerge in mid-June, with females typically emerging several days to perhaps two weeks later. Males exhibit



a meandering, but energetic flight behavior in their search for receptive females. Their flight is from two to five feet above the ground. In contrast to males, which by some account make up 80 to 90 percent of the population, females spend more time in a perching or feeding behavior. After mating, females lay their eggs – as many as 2,000 – on a variety of surfaces, including a wide variety of non-host plants, dead leaves, and pebbles (Vaughan and Shepherd 2005).

Although the caterpillars hatch in late summer, they do not feed on their host plants, Bird's-foot violet (*Viola pedata*), prairie violet (*V. pedatifida*), arrowleaf violet (*V. sagittata*), and other violets, until the following spring. Winter is spent under leaves and in leaf litter on the ground. Adult nectar sources include milkweeds (*Asclepias* sp.), thistles (*Cirsium* sp.), blazing stars (*Liatris* sp.), butterfly weed (*Asclepias tuberosa*), red clover (*Trifolium pretense*), alfalfa (*Medicago sativa*), ironweed (*Vernonia* sp.), pale-purple coneflower (*Echinacea pallida*), and mountain mint (*Pycnanthemum* sp.) (NatureServe 2016). In Illinois, regals have been observed using the Eurasian species Johnny-jump-up (*Viola tricolor*; Wisconsin DNR 2011).

#### Species Status in the Project Area

Populations of this species are extremely localized throughout the landscape and occur in a small number of sites in Illinois. Historically the regal fritillary has been recorded in more than two dozen counties in Illinois, but in the last decade observations have been confined to just fifteen counties, including Whiteside County (NatureServe 2016). This species is known to occur within the Hahnman Sand Prairie Nature Preserve (EcoCAT ID#1909027)

#### Habitat Requirements

The regal fritillary is adapted to several habitats ranging from drier sand prairies, old field grasslands, meadows, and railroad rights-of-way to more hydric sites like mesic prairies and marshy or boggy areas with grasslands (NatureServe 2016). The species is able to disperse to other suitable habitats at considerable distances. Frequently, the butterflies are found near woodlands in these same areas. Although it tolerates a variety of landscapes, three conditions are mandatory for regal fritillary's continued existence including 1) the presence of its host plants (i.e., violet species), 2) nectar sources for the adults, and 3) large site size (e.g. >100 acres; the greater the size of the site, the greater likelihood of continued viability of the species). Some research (Swengel 2001) indicates even highly degraded areas can hold sizeable regal fritillary populations, provided the above conditions are met.

#### Habitat Assessment

Although the regal fritillary is more generally dependent on open habitats and is not restricted to areas of nearly pure sand, suitable habitat for the regal fritillary consistently overlaps with ornate box turtle and plains hog-nosed snake habitat within the Environmentally Sensitive Areas. Sand prairies of various qualities, as well as old fields within the Environmentally Sensitive Areas were considered suitable for this species.

## **C. Description of Project Activities**

### **i. Practices to be Used**

#### Project Description

ComEd is the sole owner and operator of the existing L15508 transmission line, and will be responsible for all reconstruction, operation, and maintenance activities for the Project. In its entirety, the Project consists of removing 79 lattice structures (12 of which occur within the action area, 10 of which occur within environmentally sensitive areas) and installing the same number of self-supporting steel monopole structures. No new structures will be installed in the Hahnman Sand Prairie Nature Preserve and only foot traffic will be used throughout the Preserve. Five new structures will be installed within the IDNR-owned Sand Prairie Habitat Area. The conductors of the existing single circuit line and lattice structures will be completely removed and recycled. New conductors will replace the existing circuit and additional conductors will be added for future conversion into a double-circuited line. Installation of conductors will occur from the ground with pull pads on the ROW. The height of the new structures will range from approximately 100 -125 feet.

In general, construction access will be along the ROW and directly from public roads. In some cases where constraints prevent direct access from public roads, access from outside the ROW may be required from adjacent landowners. ComEd is in the process of securing landowner permission for access, including from IDNR (see Appendix A). ComEd will confirm with IDNR that all appropriate permissions, easements, and licenses have been obtained before ITA issuance. Because this is an existing transmission line and ROW, most trees and shrubs have been previously cleared; however, some vegetation clearing will be necessary prior to installing temporary construction matting. New, clean, temporary construction matting will be installed to provide access through Environmentally Sensitive Areas 1-5, wetlands, and/or other unstable soil areas where needed prior to construction access. Construction matting may consist of timber, composite, or hybrid timber mats and will be installed with rubber-tired mat trucks, forwarders, forklifts, or skid loaders. Mat access roads will be approximately 14-foot wide, and mat work platforms will be either 100 x 150 ft or 100 x 120 feet depending on the presence of turnarounds (turnarounds are included at Structures 197-200 in Environmentally Sensitive Area 3).

Upon establishing safe and efficient access along the ROW, the existing conductors will be detached from the lattice structures, lowered to the ground in a controlled manner, removed, and recycled. Next, the existing lattice structures will be removed from the ground and the holes from their foundations will be backfilled. The new monopole steel structures will require reinforced concrete caisson foundations. In general, the excavated holes for each foundation will range from five to eight feet in diameter and 20 to 35 feet in depth, or greater, depending on soil conditions. Excavated soils will be backfilled on site or removed but will not be stockpiled on site. Transmission line structures are typically transported to the site in two or three pieces, assembled at the structure location, and then erected onto the foundation. Equipment utilized for this operation typically includes cranes and bucket trucks. Once all structures within a wire pull segment are set, the new conductor wires are pulled and clipped into place. This procedure requires access to each structure with a bucket truck. Wire set-up areas containing reel trailers, wire pullers, and related equipment are located at each end of the wire pull.

Site restoration and revegetation will be based on the degree of disturbance caused by construction activities and the ecological setting of each site. Where soil disturbance occurs in environmentally sensitive areas, erosion control best management practices (i.e., silt fencing regularly inspected for holes) will be installed, maintained, and monitored until the area is revegetated. ComEd has previously installed permanent signage prohibiting access within the Hahnman Sand Prairie; such signage will continue to be maintained.

## **ii. Timeline of Activities**

Because the Project is a rebuild of an existing line, it needs to be carefully coordinated and scheduled around allowable electric outages. The Project is scheduled to begin in June 2020 and is expected to be complete by December 2020. Activities within the four environmentally sensitive areas will be completed between September and December. The following schedule is planned:

### Pre-construction

- March 2019 – An EcoCAT review was performed for the entirety of the project.
- August 2019 – A habitat characterization and plant survey of the right-of-way and work area was performed in response to rare species element occurrences within the environmentally sensitive areas.
- February 2020 – A Conservation Plan was submitted for coverage of four state-listed species within the environmentally sensitive areas.

### Construction and Restoration

- June through August 2020 – Construction in areas outside of the environmentally sensitive areas will begin (i.e., exclusively in areas without suitable habitat for state-listed species).
- July 2020 – Anticipate obtaining the ITA.

- September through December 2020 – Construction will occur in the environmentally sensitive areas. The first task will be to implement the species minimization measures.
- End of December 2020 – Construction and site restoration will be complete for the entire Project, including the environmentally sensitive areas.

#### Post-construction

- June 2021 – A habitat characterization and plant survey of the right-of-way and work area will be completed within the environmentally sensitive areas. In addition, post-construction species specific surveys for each of the state-listed species will occur concurrently.

### **iii. Permitting Reviews**

ComEd will comply with all federal, state, and local regulations. No other environmental permitting reviews are required for the Project (e.g. US Fish and Wildlife Service biological opinion or US Army Corps of Engineers wetland review).

## **D. Adverse Effects on Listed Species**

Direct effects are those effects that are caused by the action and occur at the same time and place. Indirect effects are those effects caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable.

### **i. Blanding's Turtle**

#### Direct Effects

Direct mortality to Blanding's turtle may occur from several Project construction activities including vehicle and equipment access within suitable habitat, and below-ground work within suitable habitat, such as foundation drilling and minor grading around foundation locations. Individual turtles or eggs could be accidentally crushed and killed if they are struck by a vehicle or dug up during ground disturbing activities.

A maximum of 3.01 acres of suitable Blanding's turtle habitat will be temporarily impacted by the Project from the installation of construction matting for access, work pads, and turn arounds (Table 1). All of the impacts are anticipated to occur in Environmentally Sensitive Area 3. A total of 2.67 acres of impact overlap with the other three state-listed species. The remaining 0.34 acres are exclusively considered Blanding's turtle habitat. This acreage assumes all temporary access routes will be used. All areas of temporary disturbance will be restored to pre-construction conditions once construction is complete. No permanent impacts to Blanding's turtle habitat will occur as the footprint of each structure removed will be replaced on a 1:1 areal basis.

#### Indirect Effects

No indirect effects to Blanding's turtle are anticipated as a result of the Project. Construction matting will be removed prior to the next Blanding's turtle active season, and all areas of temporary disturbance will be restored to pre-construction conditions once construction is complete.

### **ii. Ornate Box Turtle**

#### Direct Effects

Direct mortality to the ornate box turtle may occur from several Project construction activities including vehicle and equipment access within suitable habitat, and below-ground work within suitable habitat, such as foundation drilling and minor grading around foundation locations. Individual turtles or eggs could be accidentally crushed and killed if they are struck by a vehicle or dug up during ground disturbing activities.

A maximum of 7.12 acres of suitable ornate box turtle habitat will be temporarily impacted by the Project from the installation of construction matting for access, work pads, and turn arounds (Table 1). This acreage assumes all temporary access routes will be used. All areas of temporary disturbance will be restored to

pre-construction conditions once construction is complete. No permanent impacts to ornate box turtle habitat will occur as the footprint of each structure removed will be replaced on a 1:1 areal basis.

#### Indirect Effects

No indirect effects to the ornate box turtle are anticipated as a result of the Project. Construction matting will be removed prior to the next ornate box turtle active season, and all areas of temporary disturbance will be restored to pre-construction conditions once construction is complete.

### **iii. Plains Hog-nosed Snake**

#### Direct Effects

Direct mortality to the plains hog-nosed snake may occur from several Project construction activities including vehicle and equipment access within suitable habitat, and below-ground work within suitable habitat, such as foundation drilling and minor grading around foundation locations. Individual snakes or eggs could be accidentally crushed and killed if they are struck by a vehicle or dug up during ground disturbing activities.

Given the similarities in habitat requirements between the two species, the direct and indirect effects to the plains hog-nosed snake are anticipated to be the same as those outlined for the ornate box turtle above.

### **iv. Regal Fritillary**

#### Direct Effects

Direct impacts to the regal fritillary may occur from several Project construction activities including vehicle and equipment access within suitable habitat, installation of construction mats in suitable habitat, and ground disturbing activities, such as foundation drilling and minor grading around foundation locations. Adult butterflies in flight could be accidentally struck and killed by a vehicle. In addition, eggs and larvae could be crushed by passing vehicles, crushed by the installation of construction mats, or dug up during ground disturbing activities.

Up to 6.77 acres of potential regal fritillary habitat will be temporarily impacted by the Project from the installation of construction matting for access and work pads (Table 1). This acreage assumes all temporary access routes will be used. All areas of temporary disturbance will be restored to pre-construction conditions once construction is complete. Similarly to the ornate box turtle and plains hog-nosed snake, no permanent impacts to regal fritillary habitat will occur.

#### Indirect Effects

No indirect effects to the regal fritillary are anticipated to result from the Project. All areas of temporary disturbance will be restored to pre-construction conditions once construction is complete and host plants, if present, are expected to reestablish during the 2021 growing season.

Table 1. Summary of impacts within Environmentally Sensitive Areas for ComEd’s L15508 Transmission Rebuild Project in Lee and Whiteside Counties, IL.

Species and Affected Habitat	Area 1: North of Hahnman Sand Prairie - 194	Area 2: Between 194 - 195	Area 3: 196 - Northeast of 200/ Sand Prairie Habitat Area	Area 4: Between 201 - 202	Total <sup>1</sup>
Structure IDs	190-191, 191A, 192-193	n/a	196 -200	n/a	---
Number of Structures in Environmentally Sensitive Habitat	5	0	5	0	10
<i>Calculation of Total Permanent Impacts<sup>2</sup></i>					
Permanent Impact from New Structures (acres) = (# new structures x 50.3 sq. ft.) / 43,560 sq. ft.	0.006	0.00	0.006	0.000	0.017
Habitat Replacement from Removal of Lattice Structures (acres) = (# lattice structures x 50.3 sq. ft.) / 43,560 sq. ft.	-0.006	0.00	-0.006	0.000	-0.017
<b>Total Permanent Impacts in Suitable Habitat (acres)<sup>1</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<i>Calculation of Total Temporary Impacts in Suitable Habitat</i>					
Linear Distance of Matted Construction Access Road in Suitable Habitat (feet)	7,375	356	4,233	761	12,725
Temporary Impact from Matted Construction Access Road in Suitable Habitat (acres) = (linear feet x 14 ft. width) / 43,560 sq. ft.	2.37	0.11	1.36	0.24	4.09
Temporary Impact from Matted Work Pads Without Turnarounds in Suitable Habitat (acres) = (# new structures x 12,000 sq. ft.) / 43,560 sq. ft.	1.38	0.00	0.28	0.00	1.65
Temporary Impact from Matted Work Pads and Turnarounds in Suitable Habitat (acres) = (# new structures x 15,000 sq. ft.) / 43,560 sq. ft.	0.00	0.00	1.38	0.00	1.38
<b>Total Temporary Impacts in Suitable Habitat (acres)<sup>1</sup></b>	<b>3.75</b>	<b>0.11</b>	<b>3.01<sup>4</sup></b>	<b>0.24</b>	<b>7.12</b>

Species and Affected Habitat	Area 1: North of Hahnaman Sand Prairie - 194	Area 2: Between 194 - 195	Area 3: 196 - Northeast of 200/ Sand Prairie Habitat Area	Area 4: Between 201 - 202	Total <sup>1</sup>
<i>Calculation of Total Suitable Habitat Avoided for Blanding's Turtle</i>					
Suitable Habitat for Blanding's Turtle (acres)	0	0	13.53 <sup>3</sup>	0	13.53
Total Impacts in Suitable Habitat (acres)	0	0	3.01 <sup>4</sup>	0	3.01
Total Suitable Blanding's Turtle Habitat Avoided <sup>1</sup>	0	0	10.51	0	10.51
<i>Calculation of Total Suitable Habitat Avoided for Ornate Box Turtle, Plains Hog-nosed Snake, and Regal Fritillary</i>					
Suitable Habitat for Ornate Box Turtle, Plains Hog-nosed Snake, and Regal Fritillary (acres)	14.51	1.19	10.77 <sup>3</sup>	2.70	29.17
Total Impacts in Suitable Habitat (acres)	3.75	0.11	2.66 <sup>4</sup>	0.24	6.77
Total Suitable Ornate Box Turtle, Plains Hog-nosed Snake, and Regal Fritillary Habitat Avoided <sup>1</sup>	10.76	1.08	8.08	2.46	22.38

<sup>1</sup> Due to rounding error, totals may be slightly different from the value of constituent parts. Totals include work areas and both on- and off-ROW access routes.

<sup>2</sup> "Permanent impacts" occur where structures are placed and habitat is permanently removed. Since existing and new structures have the same footprint, the total amount of habitat lost will be equal to the total amount of habitat restored after structure removal; thus, the total permanent impact will be 0 acres. Further, work occurring within all current and future structure footprints are included within the same areas of temporary impacts.

<sup>3</sup> Within Environmentally Sensitive Area 3, a total of 10.77 acres of habitat are suitable for ornate box turtle, plains hog-nosed snake, and regal fritillary. All of this habitat is also considered suitable for Blanding's turtle. In addition, a wetland of approximately 2.76 acres is also suitable for Blanding's turtle but not the other three state-listed species.

<sup>4</sup> Of the 3.01 acres of temporary impacts in Environmentally Sensitive Area 3, 2.66 acres will impact habitat considered suitable to all four state-listed species. The remaining 0.35 acre is located in wetland habitat only considered suitable for the Blanding's turtle.

## **2. Minimization Measures, Mitigation, and Funding**

### **A. Number of Individuals Taken and Amount of Habitat Affected**

Occurrence records within or near the environmentally sensitive areas exist for each of the four state-listed animal species. The amount of suitable habitat affected was minimized by avoiding portions of the action area. Furthermore, take of individuals and suitable habitat will be minimized through a number of conservation measures as outlined below. Despite these best efforts, the number of individuals for each of the four state-listed species that could be impacted or taken as a result of Project activities is anticipated to range from one to five per species. Acreages of permanent and temporary suitable habitat impacted are summarized in Table 1.

### **B. Plans for Management of the Area**

Areas affected by Project activities will be restored to pre-construction conditions thereby re-establishing suitable habitat within the ROW for the four state-listed species. It is anticipated that individual landowners will manage the habitat within the ROW similarly to their adjacent lands. ComEd will install permanent "Environmentally Sensitive Area" signs within the ROW to alert maintenance crews. No specific reference to rare species will be included on signage to reduce any risk of poaching.

### **C. Measures to Avoid, Minimize, and Mitigate Effects**

Conservation measures that will be implemented by ComEd to avoid, minimize, and mitigate potential impacts to the listed species covered by this Conservation Plan, as well as the Hahnaman Sand Prairie Nature Preserve are summarized below.

#### **i. Measures to Avoid Effects**

- No physical impacts to the Hahnaman Sand Prairie Nature Preserve will occur as a result of the Project. No placement of temporary matting, construction of permanent structures, access (beyond limited foot traffic exclusively within ROW), use of heavy equipment, or on-the-ground activity will occur within the boundaries of the preserve.
- Permanent "Environmentally Sensitive Area" signs will be installed within the ROW at the northern boundary of the Hahnaman Sand Prairie Nature Preserve to alert construction and maintenance crews of the sensitive nature of the site and to keep out with equipment.

#### **ii. Measures to Minimize Effects**

- Construction activities will be initiated between September and mid-October while the Blanding's turtle, ornate box turtle, and plains hog-nosed snake are still active (i.e., prior to overwintering activities). This will allow for the installation of reptile exclusion fence along the ROW, visual encounter searches within the exclusion areas, and removal of individuals to outside of the exclusion and construction work areas.
- An onsite biological monitor will be present during all work conducted within the environmentally sensitive areas (Figure 3). The biological monitor will have field experience with the listed reptile species and their habitat and possess a valid IDNR Endangered Species Permit and IDNR Scientific Collection Permit, or similar authorization for capturing, handling, and removing Blanding's turtles, ornate box turtles, and plains hog-nosed snakes. While onsite, the biological monitor will monitor the installation of reptile exclusion fence, the placement of construction matting, ground disturbance activities, excavation of pole foundations, and passage of vehicles and equipment. The biological monitor will coordinate as necessary with the IDNR in the event of an observation or "incidental take" of a listed reptile species.

- During the turtle and snake active period, reptile exclusion fence (i.e., silt fence) will be installed along the existing ROW within the environmentally sensitive areas (Figure 3) to exclude turtles, snakes, and other animals from the construction area. The exclusion fence will completely enclose the construction work areas and have temporary gates (e.g., movable hay bales or silt fence) at the entry/exit points or be installed with turn-back wings at each end facing away from the construction area. The exclusion fence will be buried at least six inches in the ground, staked, and maintained in an upright position throughout the duration of the Project. The exclusion fencing will be opened and closed at the end of each workday as needed to allow passage of equipment and crews.
- Prior to installation of the reptile exclusion fence, the biological monitor will conduct a visual encounter search within the action area immediately ahead of the fence installation crew to locate reptiles and relocate them outside of the construction work area.
- After reptile exclusion fencing is installed, new, clean construction matting will be installed along the existing ROW through each of the environmentally sensitive areas to minimize soil compaction. In addition, the temporary mat roads will be used to connect the work areas and concentrate vehicle and equipment traffic to designated roads. Use of mat roads will reduce the risk of direct vehicle mortality by providing a relatively flat, smooth surface that is easily searchable for the listed reptiles, prior to vehicle or equipment passage. If access or work is required in a non-matted area, the biological monitor will sweep the area prior to accessing.
- The biological monitor will conduct visual encounter searches for listed reptiles ahead of the mat installation and during the active period on days when construction activities occur. All reptiles discovered will be recorded, photographed, and relocated outside of the construction work area. Construction in areas designated as suitable habitat for the listed reptile species will not take place until the biological monitor have cleared the area.
- All reptile exclusion fence and construction matting will be removed from the environmentally sensitive areas upon completion of all construction and restoration activities, and prior to the beginning of the reptiles' next active period.
- Species fact sheets for the Blanding's turtle, ornate box turtle, plains hog-nosed snake, and regal fritillary will be drafted with information on their identification, habitat requirements, active and inactive periods, and general life histories. In addition, a fact sheet will be developed for the yellow mud turtle (*Kinosternon flacescens*), although it is no longer believed to occur in the area by IDNR. The fact sheets will be provided to construction personnel for reference and reviewed periodically at daily tailgate meetings to inform the crews of the possible presence of the listed species in the action area. Crews will be asked to watch out for and report any listed species observations to the biological monitor. Fact sheets or any other educational materials will also be provided to IDNR.
- State-listed broomrape (*Orobanche ludoviciana*) associated with Structure 192 has been GPS located by the Project team. Matting and access plans will avoid direct impacts to broomrape to the extent possible. ComEd will seek express written permission of landowners to take listed plants on their properties
- No concentrations of regal fritillary host plants (i.e., violet species) were identified during the site visit on August 30, 2019. In addition, given that construction is proposed in late 2020, and all areas temporarily impacted by the Project will be revegetated prior to the next active season, no significant loss of eggs or egg laying habitat is expected to occur.
- During species active periods, speed limits of construction vehicles traveling on access roads will be limited to 12 mph or less to reduce the potential for accidental collision with the listed species. The speed limit will allow drivers to scan the mats to avoid turtles and snakes and will reduce the likelihood of striking the regal fritillary since the species can evade slow-moving vehicles.
- All existing lattice structures within the environmentally sensitive areas will be removed. A total of 10 lattice structures with four foundations each will have their holes filled, returned to grade, and restored to match surrounding habitat conditions. Each existing lattice structure has 4



foundations of 4' in diameter each, with a total footprint of 50.3 square feet. New poles have a single foundation of 8' diameter, with a footprint of 50.3 square feet. Replacement structures will be in close proximity to removed structures within the same environmentally sensitive areas. The footprint of existing and replaced structures are also included and mitigated for in totals of temporary impacts. There will be net zero permanent impact from pole removal and replacement.

- Although the line will be electrified as a single circuit immediately post-construction, infrastructure for a second circuit will be installed concurrently with project activities. This will prevent future activities within environmentally sensitive habitat when a second circuit is added to the remainder of the line.
- Upon completion of the Project, a summary report of relocated reptiles will be provided to the IDNR. Similarly, any listed reptiles accidentally killed (i.e., taken) during work or found on site throughout will be recorded (approximate age, possible cause of death), photographed, and reported to the IDNR at the conclusion of the Project.
- Upon completion of the Project, all areas of temporary disturbance will be restored to pre-construction conditions. Surface soils will be tilled and/or raked to reduce soil compaction. If the native seed bank does not reestablish, areas of disturbance within the environmentally sensitive areas will be reseeded with a mix of native grasses and forbs including bird's-foot violet (*Viola pedata*), the preferred host plant of regal fritillary larvae.

### iii. Mitigation

In addition to the avoidance and minimization measures to be implemented as summarized above, ComEd will provide compensatory mitigation in the form of a monetary contribution to the Illinois Wildlife Preservation Fund (the "Fund"). The contribution will be equally split among the four species to support conservation, research, and/or habitat improvements that will contribute to each species continued survival and recovery in Illinois. In addition to restoring all temporary impacts after construction, ComEd will voluntarily contribute \$55,700 to the Fund to offset the effects of the Project's temporary impacts to suitable habitat. This value was calculated by multiplying the total acreage of impact in Whiteside and Lee Counties (3.86 and 3.26 respectively) by the value of an acre of land (\$7,526.00 and \$8,155.00 respectively), based on data available on February 10, 2020<sup>1</sup>. This value was rounded up to the nearest \$100 for simplicity.

## D. Monitoring

A full time onsite biological monitor will be present during all work conducted within the environmentally sensitive areas (Figure 3). The biological monitor will conduct visual encounter searches for listed species ahead of the mat installation and during the species' active periods on days when construction activities are occurring. A monthly monitoring report of construction activities and listed species observations will be submitted to IDNR for all work occurring within the environmentally sensitive areas.

In addition, a habitat characterization, botanical survey, and species-specific surveys will be conducted within the environmentally sensitive areas in years one and two following construction completion to accompany the pre-construction assessment performed in August of 2019. The goal of the pre- and post-construction surveys is to document vegetation reestablishment within the environmentally sensitive areas where work occurs and to document species detections. Annual reports for years one and two post-construction will summarize the survey results and be provided to the IDNR.

## E. Adaptive Management Practices

Adaptive management is a process that will allow ComEd to adjust its actions to reflect new information or changing conditions to reach a goal, in this case, minimization of take and conservation of Blanding's turtle,

---

<sup>1</sup> Based on the value of impacted acreage in Lee and Whiteside Counties as per <https://www.acrevalue.com/map/IL/>.

ornate box turtle, plains hog-nosed snake, and regal fritillary. ComEd will use adaptive management processes to minimize take related to the L15508 Transmission Line Rebuild Project.

Specific adaptive management measures include:

- An onsite biological monitor will be present during all work conducted within the environmentally sensitive areas (Figure 3). By conducting monitoring during construction, ComEd will be able to quickly react to unforeseen circumstances that may occur.
- If changed or unforeseen circumstances arise that reduce the effectiveness of the minimization measures described in this Conservation Plan, ComEd will coordinate with the IDNR to determine if additional measures are warranted.
- If turtles or snakes are injured as a result of Project activities, ComEd will immediately stop work, contact the biological monitor, and coordinate directly with IDNR. Arrangements will be made to take the individual to a licensed wildlife rehabilitator.

## **F. Funding to Support Minimization and Mitigation**

Funding for the implementation of the conservation measures outlined in this conservation plan has been dedicated as part of ComEd's overall budget for the L15508 Transmission Line Rebuild Project.

## **3. Alternative Actions**

### **A. Preferred Alternative**

The Preferred Alternative is summarized above within the Project Description listed under 1) Likely Impacts, C) Description of Project Activities, i) Practices to be Used.

### **B. No Action Alternative**

The purpose of the Project is to improve system reliability and accommodate additional electrical capacity being added to the grid by two new renewable wind energy developments nearby. Under the No Action Alternative, L15508 would not be reconstructed and the demands for power transmission to the grid would not be met. Impacts associated with the Project would not occur. The No Action Alternative would not satisfy the Project purpose and need; therefore, ComEd rejected this alternative and continued to develop action alternatives that would satisfy the purpose and need in a manner that would result in minimal environmental impacts.

### **C. Potential Reroute Alternatives**

Avoiding negative natural resource and community impacts is a priority for ComEd. Alternatives to reroute the existing L15508 ROW such that it would have been removed from the Sand Prairie Habitat Area and existing suitable habitat were considered. However, removing and rerouting the existing line would have resulted in environmental impacts similar to the proposed action because the existing line would still need to be removed from the area. In addition, new ROW easements would need to be have been identified, negotiated, and acquired. Rerouting this portion of the line would have increased the overall length of the line, increased the overall cost, and resulted in new environmental and landowner impacts. As a result, these alternatives were not fully developed.

## 4. Likelihood of Survival of Listed Species

### A. Blanding's Turtle

Take of Blanding's turtle is estimated to range from one to five individuals, but is not anticipated to reduce the survival or recovery of the species, the biotic community of which it is a part, or the habitat essential to its existence for the following reasons:

- Approximately 13.53 acres of suitable Blanding's turtle habitat is present within the action area for the Project. A total of 10.52 acres will be avoided.
- Up to 3.01 acres of suitable Blanding's turtle habitat will temporarily impacted by the Project from the installation of construction matting for access and work pads. All areas of temporary disturbance will be restored to pre-construction conditions once construction is complete.
- A biological monitor will be onsite to implement and oversee conservation measures to avoid and/or minimize direct effects to the species within the environmentally sensitive areas, most notably measures to locate and remove turtles from the construction work area. Furthermore, much of the work will be conducted during the species' inactive period when they will be at less risk of direct impacts.
- Construction and maintenance personnel will be informed of the possible presence of turtles in the construction work area and will be asked to avoid and report all observed turtles to the biological monitor.
- Portions of the funds contributed to the Illinois Wildlife Preservation Fund as compensatory mitigation for the Project will support conservation, research, and/or habitat improvements for the Blanding's turtle in Illinois.

### B. Ornate Box Turtle

Take of the ornate box turtle is estimated to range from one to five individuals, but is not anticipated to reduce the survival or recovery of the species, the biotic community of which it is a part, or the habitat essential to its existence for the following reasons:

- Approximately 29.17 acres of suitable ornate box turtle habitat is present within the action area for the Project. A total of 22.38 acres will be avoided. All impacts within the Hahnaman Sand Prairie will be avoided.
- Up to 6.77 acres of suitable ornate box turtle habitat will temporarily impacted by the Project from the installation of construction matting for access and work pads. All areas of temporary disturbance will be restored to pre-construction conditions once construction is complete.
- A biological monitor will be onsite to implement and oversee conservation measures to avoid and/or minimize direct effects to the species within the environmentally sensitive areas, most notably measures to locate and remove turtles from the construction work area. Furthermore, much of the work will be conducted during the species' inactive period when they will be at less risk of direct impacts.
- Construction and maintenance personnel will be informed of the possible presence of turtles in the construction work area and will be asked to avoid and report all observed turtles to the biological monitor.
- Portions of the funds contributed to the Illinois Wildlife Preservation Fund as compensatory mitigation for the Project will support conservation, research, and/or habitat improvements for the ornate box turtle in Illinois.

### **C. Plains Hog-nosed Snake**

Take of the plains hog-nosed snake is estimated to range from one to five individuals, but is not anticipated to reduce the survival or recovery of the species, the biotic community of which it is a part, or the habitat essential to its existence for the same reasons outlined in the section above for the ornate box turtle.

### **D. Regal Fritillary**

Take of the regal fritillary is estimated to range from one to five individuals, but is not anticipated to reduce the survival or recovery of the species, the biotic community of which it is a part, or the habitat essential to its existence for the following reasons:

- Approximately 29.17 acres of suitable regal fritillary habitat is present within the action area for the Project. A total of 22.38 acres will be avoided. All impacts within the Hahnaman Sand Prairie will be avoided.
- Given the presence of suitable habitat, there is potential for the installation of construction matting to result in mortality to regal fritillary larvae that may be present in the leaf litter; however, host plant surveys did not identify host plants for this species. If detected, areas with the highest concentration of these plants will be avoided to the maximum extent possible during construction.
- Conservation measures will be implemented in environmentally sensitive areas to avoid and/or minimize effects to the species, specifically the identification and avoidance of their host plant species. Avoiding the host plant species will minimize impacts to eggs and larvae that may be in the leaf litter. Further, much of the work will be conducted during the species' inactive period (non-flight season) when the adults will be less likely to be at risk of direct impacts.
- Portions of the funds contributed to the Illinois Wildlife Preservation Fund as compensatory mitigation for the Project will support conservation, research, and/or habitat improvements for the regal fritillary in Illinois.

## 5. References

- Ernst, C. H. and J. E. Lovich. 2009. Turtles of the United States and Canada. John Hopkins University Press, Baltimore, MD. 827 pp.
- Ernst, C. H. and E. M. Ernst. 2003. Snakes of the United States and Canada. Smithsonian Institute Press, Baltimore, MD. 680 pp.
- Graham, T.E., and Doyle, T.S. 1977. Growth and Population Characteristics of Blanding's Turtle, *Emydoidea blandingii*, in Massachusetts. Herpetologica, 33:410-414.
- Harding, J. H. 1997. Amphibians and reptiles of the Great Lakes Region. University of Michigan Press, Ann Arbor, Michigan.
- , C.G., Dewitz, J.A., Yang, L., Jin, S., Danielson, P., Xian, G., Coulston, J., Herold, N.D., Wickham, J.D., and Megown, K., 2015, Completion of the 2011 National Land Cover Database [NLCD] for the conterminous United States-Representing a decade of land cover change information. Photogrammetric Engineering and Remote Sensing, v. 81, no. 5, p. 345- 354.
- Legler, J. M. 1960. Natural history of the ornate box turtle, *Terrapene ornata* Agassiz. Univ. Kansas Press Publ. Mus. Nat. Hist. 11(10):527-669.
- Kofron, C.P., and Schreiber, A.A. 1985. Ecology of Two Endangered Aquatic Turtles in Missouri: *Kinosternon flavescens* and *Emydoidea blandingii*. Journal of Herpetology, 19:1:27-40.
- NatureServe. 2005. Comprehensive Report Species - *Emydoidea blandingii*. [http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular\\_report.wmt&loadTemplate=species\\_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular\\_report.wmt&elKey=100408&paging=home&save=true&startIndex=1&nextStartInd](http://explorer.natureserve.org/servlet/NatureServe?sourceTemplate=tabular_report.wmt&loadTemplate=species_RptComprehensive.wmt&selectedReport=RptComprehensive.wmt&summaryView=tabular_report.wmt&elKey=100408&paging=home&save=true&startIndex=1&nextStartInd). Accessed February 2020.
- NatureServe. 2016. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://explorer.natureserve.org>. Accessed February 2020.
- Oldfield, B., and J. J. Moriarty. 1994. Amphibians and reptiles native to Minnesota. University of Minnesota Press, Minneapolis, Minnesota.
- Phillips, C. A., R. A. Brandon, and E. O. Moll. 1999. Field guide to amphibians and reptiles of Illinois. Illinois Natural History Survey, Manual 8. 300pp. Champaign, IL
- Rowe, J. W. and Moll, E. O. 1991. A radiotelemetric study of activity and movements of the Blanding's turtle (*Emydoidea blandingii*) in northeastern Illinois. Journal of Herpetology 25:178-185.
- Rowe, J. W. 1992. Dietary Habits of the Blanding's Turtle (*Emydoidea blandingii*) in Northeastern Illinois. Journal of Herpetology, 26:1:111-114.
- Swengel, A. B. 2001. Regal Weeds...The Surprising Value of an Old Field. Wisconsin Entomological Society Newsletter – November 2001. P. 4-5.
- Vaughan, D. M., and M. D. Shepherd. 2005. Species Profile: *Speyeria idalia*. In Shepherd, M. D., D. M. Vaughan, and S. H. Black (Eds). Red List of Pollinator Insects of North America. CD-ROM Version 1 (May 2005). Portland, OR: The Xerces Society for Invertebrate Conservation. <https://www.nap.edu/read/11761/chapter/19>. Accessed February 2020.
- Vogt, R. C. 1981. Natural history of amphibians and reptiles of Wisconsin. Milwaukee Public Museum, Milwaukee, Wisconsin.

Wisconsin Department of Natural Resources. 2011. Protocol for incidental take authorization: regal fritillary (*Speyeria idalia*). <https://dnr.wi.gov/topic/ERReview/Documents/GspRegalFritillary.pdf>. Accessed: February 2020.

Wisconsin Department of Natural Resources. 2017. Blanding's Turtle (*Emydoidea blandingii*) Species Guidance. <https://dnr.wi.gov/files/PDF/pubs/er/ER0683.pdf>.

## Figures

## **Appendix A: Land Ownership or Control**



Appendix A. Summary of landowner or control within the Environmentally Sensitive Areas for ComEd's L15508 Transmission Line Rebuild project in Lee and Whiteside Counties, IL.

Parcel ID	Owner Name	Street Address	City, State, Zip Code
<b>Environmentally Sensitive Area 1: North of Hahnman Sand Prairie - 194</b>			
23-24-200-006	Gregory S & Elizabeth A Wahl	27131 R St	Sterling, IL 61081
23-24-300-002	Gregory S & Elizabeth A Wahl	27131 R St	Sterling, IL 61081
23-24-300-006	Gregory S & Elizabeth A Wahl	27131 R St	Sterling, IL 61081
23-24-400-004	Gregory S & Elizabeth A Wahl	27131 R St	Sterling, IL 61081
<b>Environmentally Sensitive Area 2: Between Structures 194-195</b>			
23-24-200-009	Verda Renner	1302 Mineral Springs Road	Sterling, IL 60181
23-13-447-001	Roland Egan	3241 County Line Road	Deer Grove, IL 61243
<b>Environmentally Sensitive Area 3: 196 – Northeast of 200/ Sand Prairie Habitat Area</b>			
9-19-19-100-105	J. Dale and Wanda L. Macklin	1811 Locust Rd	Steward, IL 60553
09-19-18-300-001	People of the State of Illinois, Illinois Department of Natural Resources	One Natural Resources Way	Springfield, IL 62702
09-19-18-300-001	People of the State of Illinois, Illinois Department of Natural Resources	One Natural Resources Way	Springfield, IL 62702
<b>Environmentally Sensitive Area 4: Between 201 - 202</b>			
09-19-18-100-001	Elmer Lee and Jenny M. Ulrich	477 Eagle Rd	Harmon, IL 61042
09-19-18-200-007	Downey Farms, LLC	511 E. Fifth St	Delphos, OH 45833

## **Appendix B. Implementing Agreement**

---

# Implementing Agreement

## Conservation Plan for Blanding's Turtle, Ornate Box Turtle, Plains Hog-nosed Snake, and Regal Fritillary

### ComEd's L15508 Transmission Line Rebuild Project Lee and Whiteside Counties, IL

The Illinois Department of Natural Resources (IDNR) is responsible for the review of this Conservation Plan and for subsequent issuance of the Incidental Take Authorization (ITA). Upon approval of the Conservation Plan and issuance of the ITA, Commonwealth Edison (ComEd) will be responsible for meeting the terms and conditions of the ITA and will allocate sufficient personnel and resources to ensure the effective implementation of the plan. ComEd will oversee all avoidance, minimization, and monitoring efforts identified within the Conservation Plan. Furthermore, ComEd will be responsible for planning, contract execution, and construction supervision for the entire project.

ComEd will implement this Conservation Plan in coordination with the IDNR. The Conservation Plan Coordinator will be responsible for the plan's implementation, planning, and coordination with IDNR as specified in the plan as required in the ITA. The Lead Biologists will be responsible for coordinating and overseeing any onsite work that requires knowledge, skills, and expertise related to the listed species. The ComEd Project Manager will be Officer of Record for this Conservation Plan and Implementing Agreement and bears the corporate responsibility for compliance with the terms and conditions of the ITA.

The following schedule is planned for construction activities, monitoring, and progress reports to be provided to the IDNR:

#### Pre-construction

- **March 2019** – An EcoCAT review was performed for the entirety of the project.
- **August 2019** – A habitat characterization and plant survey of the right-of-way and work area was performed in response to rare species element occurrences within the environmentally sensitive areas.
- **February 2020** – A Conservation Plan was submitted for coverage of four state-listed species within the environmentally sensitive areas.

#### Construction and Restoration

- **June through August 2020** – Construction in areas outside of the environmentally sensitive areas will begin (i.e., exclusively in areas without suitable habitat for state-listed species).
- **July 2020** – Anticipate obtaining the ITA.
- **September through December 2020** – Construction will occur in the environmentally sensitive areas. The first task will be to implement the species minimization measures.
- **December 2020** – Construction and site restoration will be complete for the entire Project, including the environmentally sensitive areas.

Post-construction

- **June 2021** – A habitat characterization and plant survey of the right-of-way and work area will be completed within the environmentally sensitive areas. In addition, post-construction species specific surveys for each of the state-listed species will occur concurrently.

ComEd hereby certifies that it has authority and funding to complete this project and to implement all proposed conservation measures included in this Conservation Plan for the four state-listed species covered by the Incidental Take Authorization. ComEd is in charge of this project and assures that all applicable federal, state, and local laws will be adhered to during the completion of the project. No federal authorizations for taking of listed species are needed or have been issued for this project.

The following Conservation Plan Coordinator has been identified:

Sara Race  
Principal Environmental Program Manager  
Environmental Services Department  
Commonwealth Edison Company  
Two Lincoln Center, 7th Floor  
Oakbrook Terrace, IL 60181  
(630) 437-2565  
sara.race@comed.com

The following Lead Biologists have been identified:

Brian Bub, CWB  
Senior Associate  
Stantec Consulting Services Inc.  
209 Commerce Parkway  
Cottage Grove, WI 53527  
(608) 839-2037  
brian.bub@stantec.com

Amy Flansburg  
Ecologist  
Stantec Consulting Services Inc.  
209 Commerce Parkway  
Cottage Grove, WI 53527  
(608) 839-2031  
amy.flansburg@stantec.com

The ComEd Project Manager is:

Michael Hobbs  
Principal Project Manager  
Commonwealth Edison Company  
One Lincoln Center  
Oakbrook Terrace, IL 60181  
(630) 437-3140  
michael.hobbs@comed.com

As the ComEd Principal Project Manager, I, Michael Hobbs, am responsible for the implementation of this Conservation Plan and the terms and conditions of the ITA.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Michael Hobbs, Principal Project Manager