AES Ohio 1900 Dryden Road Dayton, Ohio 45439

April 13, 2022

Chairman Jenifer French Ohio Power Siting Board 180 East Broad Street Columbus, Ohio 43215

Re: Sugarcreek-Normandy Circuit Addition Project

Ohio Power Siting Board Case No. 21-0496-EL-BLN Notification of ODNR Correspondence

Dear Chairman French,

The Dayton Power and Light Company ("DP&L") doing business as AES Ohio submits this notice to inform you of the following agency correspondence to satisfy Conditions 4, 5, and 6 related to the August 19, 2021 Ohio Power Siting Board ("OPSB") approval of the above referenced project:

- On January 11, 2021, the Ohio Department of Natural Resources ("ODNR") provided an informal consultation letter for the above referenced project (Enclosure 1).
- On March 25, 2022, ODNR was notified that the above referenced project performed avian habitat assessment surveys preceding the nesting periods for the black-crowned night-heron, the loggerhead shrike, and the northern harrier (Enclosures 2 & 3).
- On March 30, 2022, ODNR provided an informal correspondence letter agreeing with the findings and mitigation measures (Enclosure 4).

AES Ohio anticipates that construction of the Project will be completed by June 30, 2022.

Please feel free to contact me if you have any questions regarding this notification letter.

Respectfully submitted,

ss:/ Randall V. Griffin

Randall V Griffin (Ohio Bar No. 0080499) Chief Regulatory Counsel AES Ohio 937-259-8983 (cell) Randall.griffin@aes.com

Enclosures: (1) Ohio Department of Natural Resources informal consultation letter; (2) Avian habitat assessment report; (3) Avian habitat assessment submission letter to Ohio Department of Natural Resources; (4) Ohio Department of Natural Resources informal correspondence



Enclosure 1 Ohio Department of Natural Resources Informal Consultation Letter





Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

January 11, 2021

Bradley Rolfes GAI Consultants 6000 Town Center Blvd., Suite 300 Canonsburg, PA 15317

Re: 20-1038; DP&L Sugarcreek No. 2 Project

Project: The proposed project involves the rebuild and installation of new and existing 69 kV line spanning approximately 4.85-miles, from the DP&L Sugarcreek Substation

Location: The proposed project is located in Sugarcreek Township, Greene County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Sugarcreek MetroPark – Five Rivers MetroParks

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (Myotis sodalis), a state endangered and federally endangered species, the northern long-eared bat (Myotis septentrionalis), a state endangered and federally threatened species, the little brown bat (Myotis lucifugus), a state endangered species, and the tricolored bat (Perimyotis subflavus), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH \geq 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31, however, limited summer tree cutting may be acceptable after consultation with DOW (contact Sarah Stankavich, sarah.stankavich@dnr.state.oh.us).

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum(a) present within the project area. Information about how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the project area, please send this information to Sarah Stankavich, sarah.stankavich@dnr.state.oh.us for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species:

Federally Endangered clubshell (*Pleurobema clava*) rayed bean (*Villosa fabalis*) snuffbox (*Epioblasma triquetra*)

<u>State Endangered</u> pocketbook (*Lampsilis ovate*)

This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2020), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts

will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2020) can be found at:

 $\frac{http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses\%20\&\%20permits/OH\%20Mussel\%20Survey\%20Protocol.pdf$

The project is within the range of the channel darter (*Percina copelandi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. The loggerhead shrike nests in hedgerows, thickets and fencerows. They hunt over hayfields, pastures, and other grasslands. If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

 $\frac{http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community \\ \%20Contact%20List 8 16.pdf$

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

Enclosure 2 Avian Habitat Assessment Report





Avian Habitat Assessment

The Dayton Power and Light Company d/b/a AES Ohio Sugarcreek-Normandy Circuit Addition Project Greene and Montgomery Counties, Ohio

GAI Project Number: R200144.02, Task 001 ODNR Reference Number 20-1038: | PUCO Case No. 21-0496-EL-BLN: March 2022



Avian Habitat Assessment

The Dayton Power and Light Company d/b/a AES Ohio Sugarcreek-Normandy Circuit Addition Project Greene and Montgomery Counties, Ohio

GAI Project Number: R200144.02, Task 001 ODNR Reference Number 20-1038: | PUCO Case No. 21-0496-EL-BLN:

March 2022

Prepared for: The Dayton Power and Light Company d/b/a AES Ohio 1900 Dryden Road Dayton, Ohio 45439

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1.0 Project Overview

The Dayton Power and Light Company d/b/a AES Ohio (AES Ohio) is building the new 69-kilovolt (kV) 6940 transmission line from its existing Sugarcreek Substation to its existing Normandy Substation, which is known as the Sugarcreek-Normandy Circuit Addition Project. A portion of this project requires the rebuild and replacement of 138-kV transmission line pole structures along a 0.52-mile-long segment of the existing 13822 Sugarcreek-Centerville line from the Sugarcreek Substation to Centerville Road and a 1.55-mile segment of the existing 13806 Sugarcreek-Bellbrook line located along Centerville Spring Valley Pike, making these single-circuit segments double-circuit. Additionally, AES Ohio will be relocating structures on circuits 13805 Hutchings-Gebhart 138-kV and 13822 just outside the Sugarcreek Substation to allow for a 69-kV substation expansion project. The 138-kV line work, as described herein, and contained in the authorized Oho Power Siting Board Case No. 21-0496-EL-BLN constitutes the "Project" for purposes of this report. Construction commenced on September 2, 2021, and restoration is expected to be completed by June 30, 2022. The Project is in Greene and Montgomery Counties, Ohio. The Project location and components are shown on Figure 1.

Project area topographic relief is nearly level (920 to 960 feet in elevation) with low-gradient headwaters giving way to contrasting ravines. Land uses including pasture, hay fields, suburban residential, and wooded riparian are present at the Project location. Wetlands, waterways, and impounded waterbodies are also present.

The Project is in the North American Bird Conservation Initiative Bird Conservation Region Eastern Tallgrass Prairie (BCR 22) and the Partners in Flight (PIF) Physiographic Area Prairie Peninsula (Physiographic Area 31).

2.0 Ohio Department of Natural Resources Coordination

In a letter dated January 11, 2021, the Ohio Department of Natural Resources ("ODNR") indicated that the Project (Reference Number 20-1038; Appendix A) is within the range of the Black-crowned Night-Heron (*Nycticorax nycticorax*), a state threatened bird, Loggerhead Shrike (*Lanius Iudovicianus*), a state endangered bird, Northern Harrier (*Circus hudsonius*), a state endangered bird, and Upland Sandpiper, a state endangered bird. Wildlife listed as threatened or endangered are identified in Ohio Administrative Code 1501:31-23.

The ODNR letter indicated that the Black-crowned Night-Heron is migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned Night-Herons primarily forage in wetlands and other shallow aquatic habitats and roost in trees nearby during the day. Black-crowned Night-Herons nest colonially in small trees, saplings, shrubs, or sometimes on the ground near bodies of water and wetlands. The letter further states that if this type of habitat will be impacted, construction should be avoided in this habitat during the Black-crowned Night-Herons nesting period of May 1 to July 31.

The ODNR letter indicated that the Loggerhead Shrike nests in hedgerows, thickets, and fencerows, and hunt over hayfields, pastures, and other grasslands. The letter further states that if thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the Loggerhead Shrike nesting period of April 1 to August 1.

The ODNR letter indicated that the Northern Harrier is a common migrant and winter species. In Ohio nesting Northern Harriers are much rarer and where present occasionally breed in large marshes and grasslands. Northern Harriers hunt over grasslands. The letter further states that if this type of habitat will be impacted, construction should be avoided in this habitat during the Northern Harrier nesting period of May 15 to August 1.

The ODNR letter indicated that the Upland Sandpiper nests in dry grasslands, including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established



through the Conservation Reserve Program. The letter further states that if this type of habitat will be impacted, construction should be avoided in this habitat during the Upland Sandpiper nesting period of April 15 to July 31.

AES Ohio contracted GAI Consultants, Inc. (GAI) to complete a Project habitat assessment for the Black-crowned Night-Heron, Loggerhead Shrike, Northern Harrier, and Upland Sandpiper.

3.0 Species Accounts

3.1 Black-crowned Night-Heron

3.1.1 Description and Distribution

The Black-crowned Night-Heron is a medium-sized heron (22 to 26 inches long) with a stocky build and relatively short neck and legs. It has a wingspan of almost twice its body length, 41 to 44 inches. Adults are monomorphic in plumage and have a distinctive black cap, upper back, and scapulars. The wings, rump, and tail are gray. Its head and sides of the neck are white with white to pale gray underparts. Along with its stocky build its bill is stout and black. Its black cap and bill are starkly contrast to its red eyes. During the species breeding period its head and back acquire a blue-green gloss with white head plumes.

The Black-crowned Night-Heron is the most widespread heron in the world (Hothem et al., 2020). In North America, breeding individuals are most abundant coastally, although they nest locally in southern Canada and the contiguous United States (U.S.) (Hothem et al., 2020). Black-crowned Night-Herons can also be found year-round along the U.S. coastline, major river basins such as the Colorado and Mississippi, and in eastern portions of Michigan's lower peninsula and northern Ohio near the Great Lakes (Hothem et al., 2020). This is particularly the case when the species North American range constricts during the winter (Hothem et al., 2020). In Ohio, most breeding individuals are located on the western shore of Lake Erie (Rodewald et al., 2016). During the state's second Breeding Bird Atlas survey efforts, Black-crowned Night-Herons were observed in Montgomery County, but not identified as probable or confirmed as breeding; no records occur for Greene County (Rodewald et al., 2016). The Black-crowned Night-Heron is migratory and are typically found in Ohio from April 1 through December 1 but can be found year-round in more urbanized areas with reliable food sources (ODNR, 2021; Appendix A). Ohio Breeding Bird Survey results have indicated a consistent long-term annual population decline of 2.06 percent from 1966 to 2015 (Sauer et al., 2017).

The Black-crowned Night-Heron is listed as a Species of Conservation Concern for BCR 22 with Breeding Bird Survey results indicating an annual decline of 0.66 percent from 1996 to 2015 (Sauer et al., 2017; USFWS, 2008). The Black-crowned Night-Heron is not listed as a priority species for PIF Physiographic Area 31 (Fitzgerald et al., 2000).

3.1.2 Habitat

Black-crowned Night-Heron habitat is highly variable given its global distribution. Breeding colonies occur in a wide variety of sites near fresh, brackish, or salt water (Baicich and Harrison, 2005). However, in Ohio freshwater wetlands, waterbodies, and other shallow aquatic habitats where trees, saplings, and shrubs are present are used for nesting, roosting, and foraging (ODNR, 2021; Appendix A). Areas with aquatic vegetation or forested and unforested margins of shallow rivers, streams, ponds, lakes, swamps, and marshes are generally suitable habitat during the nesting period to meet the species' nesting and foraging requirements (Kushland and Hancock, 2005). As a colonial nesting species habitat that provides protection from predators (primarily ground-based) and is proximal to foraging habitat are often exploited by numerous pairs.



3.1.3 Life History

Nests are placed in all types of trees, bushes, and thickets from near ground level up to 150 feet above ground (Baicich and Harrison, 2005). Nests, however, are usually placed in a tree or large shrub between 15 and 30 feet above the ground (Ehrlich et al, 1988). Nests are placed near bodies of water and wetlands and most often on an island or in dense vegetation above water to minimize predation (ODNR, 2021; Appendix A; Hothem et al., 2020; Jacobs and Wilson, 1997). At Ohio's regionally important West Sister Island, an island without mammalian predators, in the western basin of Lake Erie, Black-crowned Night-Herons prefer to nest in shorter tress reaching heights of seven to 16 feet (Shieldcastle and Martin, 1997). When nests are in marshes, they are placed in Phragmites, cattails, grass tussocks, and *Scirpus* species (Baicich and Harrison, 2005).

Nests are initially constructed by males followed females building with material brought by the male (Baicich and Harrison, 2005). Nests consist of a platform of sticks, often radiating outward, lined with finer material (Baicich and Harrison, 2005). Nest diameters can reach up to 24 inches with a depth of 18 inches (Baicich and Harrison, 2005). Nests could initially be a loose assemblage of sticks but in subsequent years built upon to form a substantial platform that is used annually (Ehrlich et al, 1988). Perennial use of nests is common in colonially nesting birds such as the Black-crowned Night-Heron. The Black-crowned Night-Heron could form single species colonies or coalesce with other herons or colonial waterbirds (Baicich and Harrison, 2005).

Black-crowned Night-Herons are monogamous and usually single-brooded with three to four or even five eggs (Baicich and Harrison, 2005, Ehrlich et al., 1988). Nesting pairs will defend their nest together during the nesting period (Ehrlich et al., 1988). Both males and females incubate the eggs until hatching occurs around 24 to 26 days (Baicich and Harrison, 2005). Nestlings begin to leave the nest at two to three weeks but return to the nest to be fed by both parents (Baicich and Harrison, 2005). Around four weeks of age the nestlings continue to be fed by both parents but now away from the nest (Baicich and Harrison, 2005). At six weeks of age young can fly and fledge the nest (Baicich and Harrison, 2005).

Black-crowned Night-Herons are stalking piscivores but are opportunistic aquatic foragers and may prey upon young birds when nesting in a mixed-species colony or on small vertebrates especially amphibians in the spring (Hothem et al., 2020; Ehrlich et al., 1988). Night-herons are so named because they are nocturnal, conducting most of their foraging from dusk to dawn (Hothem et al., 2020; Ehrlich et al., 1988). Black-crowned Night-Herons primarily forage in wetlands and other shallow aquatic habitats (ODNR, 2021; Appendix A).

In Ohio, the Black-crowned Night-Herons nesting period is from May 1 to July 31 (ODNR, 2021; Appendix A).

3.2 Loggerhead Shrike

3.2.1 Description and Distribution

The Loggerhead Shrike is a small (nine inch long) predatory passerine with a striking coloration of black, gray, and white. With a black mask, hooked bill, tomial tooth, and bulky head, the "Butcherbird" sits up-right atop its perch in search of prey. Its flight pattern is unique. The shrike swoops down from its perch and with rapid, flickering wing beats showing its white wing patches, flies low to the ground before swooping to perch again.

Individuals that breed north of latitude 40 degrees north, where snow cover is generally present 10 to 30 days of the year, generally migrate south for the winter months (Yosef, 2020). Populations that breed south of latitude 40 degrees north are generally considered non-migratory. Ohio is split at latitude 40 degrees north and therefore shrikes could reside year-round or migrate south during the winter. Prior to European settlement Ohio populations,



assuming species presence, would have been restricted to prairie openings (Rodewald, et al. 2016). The species occupancy of central and eastern states could have originated in the later 1800's following the clearing of wooded areas and creation of open farmlands with a patchwork of fence rows containing scattered trees and shrubs (Novak, 1989; Yosef, 2020).

Since the mid-1960's populations have declined substantially throughout most of its range as land use practices changed. Pastures and other open spaces with appropriate habitat characteristics were replaced with overgrown fields, larger crop fields, or other unfavorable development (Rodewald et al., 2016). The reasons for the species decline have not been firmly established, but habitat loss through conversion of agricultural areas to other uses and habitat degradation because of changes in farming practices are thought to play a substantial role (Bartgis, 1992). Ohio Breeding Bird Survey results have indicated a consistent long-term annual population decline of 8.28 percent from 1966 to 2015 (Sauer et al., 2017). The Loggerhead Shrike is now one of the rarest breeding birds in Ohio and imminent extirpation is likely (Rodewald et al., 2016).

The Loggerhead Shrike is listed as a Species of Conservation Concern for BCR 22 with Breeding Bird Survey results indicating an annual decline of 5.12 percent from 1966 to 2015 (Sauer et al., 2017; USFWS, 2008). The Loggerhead Shrike is not listed as a priority species for PIF Physiographic Area 31 (Fitzgerald et al., 2000).

3.2.2 Habitat

The Loggerhead Shrike is an open-country species using pastures, meadows, prairies, and other short grassy open habitat with scattered trees, shrubs, and/or hedgerows (Rodewald et al., 2016). Where woody vegetation has grown too densely the species may avoid the area as prey and predators may be difficult to see. Short vegetation or bare soil areas provide for increased prev visibility. Loggerhead Shrike habitat has been described as a mosaic of shrubs and openings in nearly level topography (little slope) (Poole, 1992; Dechant, et al., revised 2001). In the Midwest, where the dominant land use is row crops, linear strips along roadways and narrow corridors provide the remaining areas meeting the species foraging, perching, and nesting substrate requirements (DeGeus, 1990; Collister and Henry, 1995; Pruitt, 2000). Typical breeding habitat in Ohio consists of pastures, meadows, prairie remnants, and other open grassy habitats for hunting, and the presence of scattered trees, shrubby thickets, and fencerows for prey impalement and nest placement (Yosef, 2020; Rodewald et al., 2016). Shrikes have shown to select nest sites dominated by active pasture with less than 20 percent woody cover (Luukkonen, 1987; Novak, 1989). Where Loggerhead Shrikes are year-round residents, they often move from pastures to shrub and open forest habitats, which provide cover and food during periods of cold, wet weather (Blumton, 1989). Breeding and winter foraging habitats are similar, although hay fields and idle pasture have shown to be more heavily used during the winter (Bartgis, 1992; Pruitt. 2000). Additional research on the species wintering grounds is needed and a priority to assessing threats to the species during its full annual cycle.

Loggerhead Shrikes are territorial year-round. Resident pairs may reside year-round in a single territory or defend separate territories outside the breeding season (Yosef, 2020). Migrants defend individual territories during the winter. In Ohio each of these territorial scenarios can be observed. Males are more likely than females to reoccupy breeding territories in subsequent years (Kridelbaugh, 1982; Luukkonen, 1987; Brooks, 1988; Bartgis, 1992; and Haas and Sloane, 1989).

Territories of 5.7 to 9.3 hectares (ha) (14 to 23 acres [ac]) and 4.6 ha (11 ac) have been reported in New York and Missouri, respectively (Miller, 1931; Kridelbaugh, 1982). Collectively, research across the shrikes breeding range reports a mean territory size from 4.6 to 34 ha (11 to 84 ac) (Yosef, 2020).



Eastern red cedar (*Juniperus virginiana*) and hawthorns (*Crataegus* spp.) are used for nest sites. Other woody vegetation used for nest sites include Osage orange (*Maclura pomifera*) and multiflora rose (*Rosa multiflora*) (Esely and Bollinger, 2001). Trees with heavy growth of vines such as Japanese honeysuckle (*Lonicera japonica*) or grape vines (*Vitis* spp.) are also preferred (Bartgis, 1992).

3.2.3 Life History

The bulky, well woven open-cup nests are placed in dense foliage of woody vegetation (shrubs and small trees, but most frequently in isolated trees) within five to 20 feet of the ground (Baicich and Harrison, 2005). In Virginia, the standard nest height has been reported at a height of 8.5 feet (2.6 meters [m]) in trees averaging 22 feet (6.8 m) tall with mean nest height (18 feet [5.5 m]) increasing in second and third nesting attempts (Luukkonen, 1987). Novak's (1989) New York study indicated nests are usually located more than three feet (one meter) from the outside of the tree and at a height of five to eight feet (1.5 to 2.5 m) in trees that were 13 to 16 feet (four to five meters) tall.

Loggerhead Shrike lay four to five eggs per clutch, sometimes six to seven (Baicich and Harrison, 2005). Incubation by the female lasts about 14 to 16 days. The young are tended by both adults and fledge in 17 to 21 days following hatching (Baicich and Harrison, 2005). Two broods per breeding season are common for the species (Baicich and Harrison, 2005).

In Ohio, the shrike's nesting period is from April 1 to August 1 (ODNR, 2021; Appendix A).

3.2.4 Feeding Behavior

Loggerhead Shrikes are primarily insectivorous but prey upon frogs, lizards, snakes, small mammals, and birds. Large insects form the bulk of their summer diet, with vertebrates predominating their winter diet. Like other shrikes, the Loggerhead Shrike kills vertebrate prey using its tomial tooth for piercing the neck and inducing paralysis. Shrikes earn their nickname Butcherbird through their distinctive behavior of impaling their prey. In the absence of talons, which birds of prey use to stabilize their food, shrikes impale their prey on sharp objects, such as thorns and barbed wire. Shrikes can carry prey with their feet as heavy as their own body mass (Yosef et al., 2020). In a Minnesota study Loggerhead Shrikes were found to forage up to a quarter-mile away nests (Brooks, 1988).

3.3 Northern Harrier

3.3.1 Description and Distribution

The Northern Harrier is a sexually dimorphic, slender, white-rumped, medium-sized (18 inches long), low-flying raptor of upland grasslands and fresh and saltwater marshes. It has relatively long wings and tail of about 13 to 15 and 8 to 10 inches, respectively, with females being about 12.5 percent larger and 50 percent heavier than males (Smith et al., 2020). During flight, wings are held in a dihedral while flying low to the ground. Adult males are gray above, mostly white below, and with black wingtips and tips to secondaries. Adult females are brown above and buffy with brown streaks below. The Northern Harrier, a long-distance migrant, is the most northerly breeding and broadly distributed harrier (Smith et al., 2020). The species primarily breeds in the western plain states and most of Canada and into Alaska.

Historically, Northern Harrier numbers increased in the 1800s in response to the removal of eastern forests for timber and agriculture, but in the 1900s extensive local population declines occurred throughout the species' breeding range when forests regenerated and wetlands, undisturbed grasslands, and native prairies were lost (Smith et al., 2020). The Northern Harrier was once known as the marsh hawk due to its preference for wet grasslands and wetland margins (Smith et al., 2020; Rodewald et al., 2016). Changes in habitat are a primary cause for the species decline; conversion of native grassland prairies to agricultural fields and loss of



wetlands has impacted the Northern Harrier (Duebbert and Lokemoen, 1977; Toland, 1985). Data collected during the first (1982 to 1987) and second (2006 to 2011) Ohio's second Breeding Bird Atlas (BBA) census efforts were sparse, with the species being confirmed as breeding in less than one percent of priority blocks (Rodewald et al., 2016). Ohio's second BBA data could also not be used to generate trend estimates, because observations are too few (Rodewald, et al., 2016). Ohio Breeding Bird Survey results have shown a consistent long-term annual increase of two percent from 1966 to 2015 (Sauer et al., 2017).

The Northern Harrier is not listed as a Species of Conservation Concern for BCR 22; however, Breeding Bird Survey results indicate an annual decline of 3.17 percent from 1966 to 2015 (Sauer et al., 2017; USFWS, 2008). The Northern Harrier is not listed as a priority species for PIF Physiographic Area 31 (Fitzgerald et al., 2000)

3.3.2 Habitat

The Northern Harrier occupies a variety of open habitats, including wet and dry areas as long as there is good ground cover. As with most other harriers, the Northern Harrier nests on the ground, usually in tall, dense clumps of vegetation, either alone or in loose colonies (Smith et al., 2020). Throughout its range, breeding habitat is described as open wetlands, including marshy meadows; wet, lightly grazed pastures; old fields; freshwater and brackish marshes, and tundra; dry uplands, including upland prairies, mesic grasslands, drained marshlands, croplands, cold desert shrub-steppe, and riparian woodland (Niles et al., 1996; Smith et al., 2020). In the Midwest, Northern Harrier breed predominantly in seasonal or semi-permanent wetland habitats (Kantrud and Stewart, 1984). In Ohio, the ODNR (2020) identifies large marshes and grasslands as Northern Harrier breeding habitat.

Similarly, the size of occupied habitat varies throughout the species range. Reclaimed grasslands in the northern Great Plains were occupied by the Northern Harrier when habitat exceeded 250 acres, with the species demonstrating preference for larger areas (Johnson and Igl, 2001). Elsewhere in the species range, such as in southeastern Illinois, a minimum of 135 acres may support breeding individuals (Walk and Warner, 1999). Another study in southern Illinois documented a minimum habitat size for nesting between 20 and 40 acres (Herkert, et al., 1999). In New England, fields of 25 to 135 acres (Serrentino, 1992) to areas greater than 250 acres (Vickery et al., 1994) contained nests. Slater and Rock (2005) suggest the disparity among the size of habitat occupied by the species is likely due to their ability to "exploit small fragments of suitable habitat for nesting when they are situated near larger blocks of suitable habitat because of their long-distance foraging capabilities".

3.3.3 Life History

Nests are built by the female and located on the ground and often on top of a mound in the shelter of taller vegetation, shrubs or grasses (Baicich and Harrison, 2005; Ehrlich et al., 1988). Nests are constructed of sticks, grass and other materials and lined with fine material (Ehrlich et al., 1988). Clutch size ranges from four to six eggs which are incubated for 29 to 39 days (Baicich and Harrison, 2005). Young can fly at about 37 days after hatching (Baicich and Harrison, 2005). While most males are monogamous, polygamy is evident and some males may have up to five mates during the breeding season (Smith et al., 2020). Their tendency to breed in loose colonies could be associated with male polygamy.

In Ohio, the Northern Harrier's nesting period is from May 15 to August 1 (ODNR, 2021; Appendix A).



3.4 Upland Sandpiper

3.4.1 Description and Distribution

The Upland Sandpiper is a medium-sized sandpiper with a brown-buff-white cryptic, monotypic plumage adapted to grassland habitat (Houston, 2020). With an overall length of up to one foot, males are generally smaller than females (Vickery et al., 2010). The small, dovelike head, big eyes, and short, black-tipped yellow bill, this species' head rests upon a body with a long tail and lengthy yellow legs (Houston, 2020). The species characteristically holds its wings erect before folding them upon landing on a perch or the ground (Houston, 2020).

During the nineteenth century, Upland Sandpiper populations fluctuated. Numbers increased when habitat availability increased following conversion of forests to farmland, then subsequently declined due to hunting pressure and abandonment of open areas (e.g., regrowth of woody vegetation) or change in land use (e.g., conversion of hayfield to row crops) (Peterjohn and Rice, 1991; Tate, 1986). In the early 1980's, almost three-quarters of Ohio's Upland Sandpiper observations were in grassy fields adjacent to airports (Osborne and Peterson, 1984). Results from the second Ohio BBA indicate that grassy fields at smaller and usually municipal airports are used today, with almost two-thirds of observations recorded at these locations (Rodewald et al., 2016).

Data collected during the first (1982 to 1987) and second (2006 to 2011) Ohio BBA census efforts was sparse, with the species confirmed as breeding in less than one percent of priority blocks (Rodewald et al., 2016). During the second Ohio BBA, multiple Probable and Confirmed breeding records are recorded in western Ohio; one Probable block in Montgomery County and none in Greene County. Ohio's second BBA data could not be used to generate trend estimates, because observations are too few (Rodewald, et al., 2016).

The Upland Sandpiper is listed as a Species of Conservation Concern for BCR 22 and Breeding Bird Survey results indicate an annual decline of 1.9 percent from 1966 to 2015 (Sauer et al., 2017; USFWS, 2008). The Upland Sandpiper is not listed as a priority species for PIF Physiographic Area 31 (Fitzgerald et al., 2000)

3.4.2 Habitat

Sandpipers are typically shorebirds; however, this species occupies grasslands during the breeding season. The Upland Sandpiper is a bird of open grasslands, hayfields and pastures, airport grasslands, and meadows. It is dependent on the availability of large, level upland areas of undisturbed, short grasslands with interspersed or adjacent taller grasses (Peterjohn and Rice, 1991; Robbins and Blom, 1996 and references therein; Houston, et al. 2020 and references therein; Rodewald et al., 2016 and references therein). Various vegetation heights are used for different purposes. Short grasses are used for foraging and brood rearing, and taller grasses for nesting. Vegetation heights that support these uses range from one-foot to two feet (Peterjohn and Rice, 1991; Dechant et al., 2002). Areas of topographic relief (hilly terrain), overgrazed pastures, row crops, and regularly mowed hayfields are normally avoided (Peterjohn and Rice, 1991). Locations with low to moderate forb cover and moderate to high litter cover and little bare ground are also used by the species (Dechant et al., 2002). Fence posts and telephone poles serve as perch sites and a location to defend the territory (Peterjohn and Rice, 1991). The species has shown site fidelity on their breeding grounds (Dechant et al., 2002 and references therein).

The Upland Sandpiper is highly sensitive to habitat fragmentation. Abundance is positively correlated with tract size and negatively correlated with perimeter-area ratio (Dechant et al., 2002 and references therein; Helzer and Jelinski, 1999). Upland Sandpipers are infrequently found and generally do not nest in grasslands less than 125 acres in size, with 50 percent incidence at sites greater than 500 acres (Vickery et al., 1994). However, other studies suggest



minimum tract sizes of greater than 75 acres or 185 acres are necessary (Dechant et al., 2002 and references therein). Management objectives for the species focuses on maintaining large (greater than 250 acres) contiguous tracts of prairie to minimize the edge to area ratio and providing habitat heterogeneity specific to vegetation heights (Dechant, et al., 2002, and references therein).

3.4.3 Life History

In Ohio the Upland Sandpiper arrives from its South American wintering grounds starting in the middle of April (Peterjohn and Rice, 1991). The Upland Sandpiper occupies its North American breeding grounds for as little as a four-month duration (Houston, 2020). During migration the species can complete the North America to South America trans-continental flight in one week (Houston, 2020). Upland Sandpipers spend up to eight months in South America for the non-breeding season (Houston, 2020).

Upland Sandpipers form loose breeding colonies, and in Ohio, as many as five to eight pairs have been observed in open fields bordering airports (Peterjohn and Rice, 1991). Nests are in a shallow depression on the ground surrounded by grass, particularly overhanging grass, to help conceal the nest (Harrison, 1975). Their nests are hidden in dense grass, usually in the middle of a large field, and are difficult to locate (Peterjohn and Rice, 1991). The normal clutch consists of four eggs (Harrison, 1975). In Ohio, most clutches are laid in May (Peterjohn and Rice, 1991). Upland Sandpipers are a single brood species but may re-nest in the same season following a nest failure (Harrison, 1975). Incubation averages 21 days and is done by both adults (Harrison, 1975). Following hatching, precocial young leave the nest to be raised in rearing fields which may be up to 1,500 feet away from the nest (USDA Forest Service, 2003). In Ohio, young fledge by mid-July, about 30 days following hatching, shortly before migrating to their wintering grounds (Ehrlich et al., 1988; Peterjohn and Rice, 1991).

In Ohio, the Upland Sandpiper's nesting period is from April 15 to July 31 (ODNR, 2021; Appendix A).

4.0 Habitat Assessment Methods

Following a literature review of Black-crowned Night-Heron, Loggerhead Shrike, Northern Harrier, and Upland Sandpiper and considering the ODNR's description of the species breeding habitat characteristics in Ohio a review of aerial imagery for the Project was completed. Per prior discussions with the ODNR regarding the Northern Harrier and Upland Sandpiper, grasslands do not have to be of a certain size to warrant assessment. Based on a review of aerial imagery a habitat assessment for each of the four species was warranted. A habitat assessment around Sugarcreek Substation was not completed because vegetation was previously disturbed outside each of the four species nesting periods, construction is complete, and restoration is in progress.

During the field habitat assessment, land uses crossed by the Project and within the landscape were described and demarcated on aerial imagery. Qualitative data collection included vegetation assemblage and condition, anthropogenic influence, vegetation management practices, and other ancillary attributes to describe the location. Fences, particularly barbed wire fences, were identified. Vegetation, such as honey locust (*Gleditsia triacanthos*) and Osage orange (*Maclura pomifera*), that could provide impalement substrate for Loggerhead Shrike prey was also identified. Systematic quantitative data was not collected. Photographs were taken to document assessed habitat.

The results of the habitat assessment were evaluated for each of the species to document potential habitat. The habitat assessment was limited to the Study Area shown on Figure 2.



5.0 Habitat Assessment Results

Provided is a brief qualitative description of the assessed Project locations. The accompanying photographs are keyed to their location on Figure 2. The assessed locations are described from west to east along Centerville Spring Valley Road and north to south from Centerville Road to Proposed Structure 423499. The location of potential habitat within the Study Area is also shown on Figure 2. Where potential habitat could extend outward from the Study Area it is demarcated as open-ended habitat on Figure 2.



Centerville Spring Valley Road

Figure 2, Sheets 1 and 2 of 3

At this location the line paralleled Centerville Spring Valley Pike within a utility corridor and road Right-of-Way ("ROW"). In general, the line passed through maintained residential lawns, maintained grass open space, and sidewalks. The line also spanned Sugar Creek where white ash (*Fraxinus americana*), red maple (*Acer rubrum*), American sycamore (*Platanus occidentalis*), and hackberry (*Celtis occidentalis*) were present. In the ROW along the banks of Sugar Creek were saplings of black locust (*Robinia pseudoacacia*) and boxelder (*Acer negundo*), as well as honeysuckle (*Lonicera* sp.). Where the sidewalk was within the ROW, hedges of honeysuckle and *Forsythia* species screened the road and transmission line from the residences. Photographs 1, 2, and 4 are representative of this location.

From Photograph 3 to approximately 1,700 feet east, the line paralleled Centerville Spring Valley Pike within a utility corridor and road ROW that was bordered by a wooded area. The ROW was recently cleared of vegetation and brush. Trees adjacent to the ROW included black cherry (*Prunus serotina*), black walnut (*Juglans nigra*), sugar maple (*Acer saccharum*), American sycamore, red maple, white ash, and hackberry. Honeysuckle dominated the understory. Standing snags were also present. Waterstained leaves and sediment deposits were observed, and the area appeared to be seasonally inundated but was not observed. The snags could be trees that succumbed to prolonged hydrologic conditions. Photograph 3 is representative of this location.

These locations are not considered potential Black-crowned Night-Heron habitat because there is no aquatic habitat for foraging or suitable trees for roosting or nesting. These locations are not considered potential Loggerhead Shrike habitat because there is no open space or vegetation and substrate for prey impalement. These locations are not considered potential Northern Harrier and Upland Sandpiper habitat because there is no open grassland or comparable land use.





Photograph 1. Viewing east in the ROW along Centerville Spring Valley Pike towards proposed Structure 423445¹

¹ The date stamp on the photographs was incorrect and has been blacked-out.





Photograph 2. Viewing east in the ROW along Centerville Spring Valley Pike towards proposed Structure 423455



Photograph 3. Viewing east in the ROW along Centerville Spring Valley Pike towards proposed Structure 423466





Photograph 4. Viewing west in the ROW along Centerville Spring Valley Pike towards proposed Structure 423474



Centerville Road to Proposed Structure 423499

Figure 2, Sheet 3 of 3

From Centerville Road south to proposed Structure 423499 the line passed through pasture, an open woodland, and aquatic resources that included a low-gradient stream valley with herbaceous wetland and an impounded waterbody.

The condition of the pasture was mixed with portions in the ROW and immediate adjacent areas moderately to heavily grazed. Herbaceous vegetation at this location was dormant at the time of the habitat assessment which inhibited the observance of conditions during the growing season. However, rigid vegetation including chicory (*Cichorium intybus*), cocklebur (*Xanthium strumarium*), Queen Anne's lace (*Daucus carota*), and *Aster* species reached heights of up to three feet. Mugwort (*Artemisia vulgaris*) was also present and reached heights of up to four feet. Other herbaceous vegetation observed in the pasture included tall fescue (*Schedonorus arundinaceus*), which was dominant and bent over, Carolina horsenettle (*Solanum carolinense*), and yellow foxtail (*Setaria viridis*). Some portions of pasture were noticeably recently brushed mowed, whereas other locations were heavily grazed to only a few inches of herbaceous vegetation. Around the impounded waterbody vegetation was noticeably dense compared to the other pasture locations and where tall fescue was the densest. The pasture was generally void of woody vegetation except for a scattering of multiflora rose (*Rosa multiflora*) and saplings and mature osage orange (*Maclura pomifera*) trees.

Barbed wire fences were present throughout the pasture and were lined with woody vegetation that included buckthorn (*Rhamnus* sp.), mulberry (*Morus alba*), honeysuckle, chokecherry (*Prunus virginiana*), Bradford pear (*Pyrus calleryana*), Osage orange, multiflora rose, and white ash saplings. Blackberry (*Rubus allegheniensis*) was also present along the barbed wire fences but a limited amount. The vegetation along the barbed wire fences was either scattered, hedge forming, or absent.

A baled hay field was also observed east of the ROW at proposed Structure 52044.

Photographs 5 through 8, 10 through 12, 15 and 16, 18 and 19, and 22 are representative of the pasture and hay field.

The pasture and hay field are considered potential Loggerhead Shrike, Northern Harrier, and Upland Sandpiper habitat because of the open grassland conditions. This included approximately 150 acres within and extending outward from the Study Area. Under limited grazing conditions the herbaceous vegetation around the impounded waterbody and some of the other limited grazed pasture sections could provide suitable nesting substrate for the Northern Harrier and Upland Sandpiper. The broader landscape could provide opportunities for foraging. The observed vegetation and barbed wire fence would provide the shrike with prey impalement and nesting substrate.

The open woodland consisted of mature scarlet oak (*Quercus coccinea*), white ash, Osage orange, and shagbark hickory (*Carya ovata*). Standing snags were also observed in the open woodland. The understory was primarily clusters of multiflora rose. The open woodland is considered potential Black-crowned Night-Heron roosting habitat because of its proximity to the stream valley with herbaceous wetland and the impounded waterbody. Photograph 13 is representative of the open woodland.

The stream valley with herbaceous wetland was a relatively straight low-gradient stream but meandered with oxbows and sediment deposits. The perennial stream is an unnamed tributary to Sugar Creek with a bank full width of six feet and gentle banks of three feet in depth. At the time of the habitat assessment the stream was bank-full with noticeable recent overflow as indicated by bent-over vegetation. Vegetation observed in the wetland at the time of the delineation (June 17, 2020) included reed canary grass (*Phalaris arundinacea*), sweet flag (*Acorus calamus*), *Carex vulpinoidea*, *Carex frankii*, and boneset (*Eupatorium perfoliatum*). Photographs 9 and 21 are representative of the stream valley with herbaceous vegetation. Photograph 21 is viewing downstream towards the impounded waterbody whereas Photograph 9 is downstream of the impoundment.



The impounded waterbody appeared to have 2:1 sloped banks consisting of tall fescue, reed canary grass, Queen Anne's Lace, *Aster* species, and chickory. At the time of the habitat assessment the waterbody was bank full and murky and thus observation of the fringe characteristics was inhibited. At the time of the habitat assessment Mallard (*Anas platyrhynchos*), Hooded Merganser (*Lophodytes cucullatus*), Northern Shoveler (*Spatula clypeata*), and Canada Goose (*Branta canadensis*) were observed in the impoundment. Photographs 14, 17, and 20 are representative of the impounded waterbody. Photograph 21 shows the stream flow into the impoundment at the adjacent black walnut and white ash trees.

The stream valley herbaceous wetland and impounded waterbody are considered potential Black-crowned Night-Heron roosting and foraging habitat, but not nesting habitat. The gentle banks of the stream, its oxbows, and fringe of the impoundment could provide suitable foraging opportunities for the Black-crowned Night-Heron. The nearby open woodland and trees along the inflow to the impoundment (see Photograph 21) could provide suitable roosting habitat, but not nesting habitat because they are not over water or on an island which is typical of most heronries. A collection of stick nests was not observed in the Study Area.



Photograph 5. Viewing north in the ROW towards proposed Structure 520248





Photograph 6. Viewing east towards the ROW



Photograph 7. Viewing south in the ROW at proposed Structure 520246





Photograph 8. Viewing west at proposed Structure 520246 and away from the ROW



Photograph 9. Viewing south in ROW towards proposed Structure 520245





Photograph 10. Viewing north at a pasture west of the ROW



Photograph 11. Viewing east toward the ROW and proposed Structure 520245





Photograph 12. Viewing south in a pasture west of the ROW



Photograph 13. Viewing east of proposed Structure 520245 at an open woodland





Photograph 14. Viewing south towards proposed Structure 520244 and an impounded waterbody



Photograph 15. Viewing south in the ROW at proposed Structure 520244





Photograph 16. Viewing north in a pasture west of the impounded waterbody and the ROW



Photograph 17. Viewing east at an impounded waterbody and the ROW





Photograph 18. Viewing south in a pasture west of the impounded waterbody and the ROW



Photograph 19. Viewing west in a pasture west of the impounded waterbody and the ROW





Photograph 20. Viewing north from proposed Structure 303970 at an impounded waterbody



Photograph 21. Viewing north adjacent to proposed Structure 423499 at a waterway flowing into an impounded waterbody





Photograph 22. Viewing north at a hay field east of the ROW



6.0 Conclusions

Habitat assessments for the Black-crowned Night-Heron, Loggerhead Shrike, Northern Harrier, and Upland Sandpiper were completed on March 9, 2022, for the Sugarcreek-Normandy Circuit Addition Project. The habitat assessment fieldwork and report were completed by Mr. Matthew White. Mr. Anthony Glenn assisted with field work. Mr. White's resume is provided in Appendix B.

The Project landscape and topography was typical for the area and open space was primarily in the form of pasture and hay fields. Woodlots, waterways with wetlands, and waterbodies are also present in the landscape. The portion of the Project along the road is a typical utility road ROW in an urban landscape.

Potential habitat for the Black-crowned Night-Heron, Loggerhead Shrike, Northern Harrier, or Upland Sandpiper was not identified for the portion of the Project that parallels Centerville Spring Valley Road.

GAI recommends that the following land uses from Centerville Road to proposed Structure 423499 be considered potential habitat for one or more of these avian species:

- Pasture and hay field
 - Loggerhead Shrike, Northern Harrier, and Upland Sandpiper foraging and nesting habitat
- Open woodland and trees along the inflow to the impoundment
 - Black-crowned Night-Heron roosting habitat
- Stream valley with herbaceous wetland and impounded waterbody
 - Black-crowned Night-Heron foraging habitat

These locations are shown on Figure 2. Where demarcated potential habitat could extend beyond the identified boundaries, Figure 2 shows polygons as open-ended habitat.

The scope of this habitat assessment was limited to the locations described herein. GAI and AES Ohio request ODNR's concurrence with the findings of this avian habitat assessment report.



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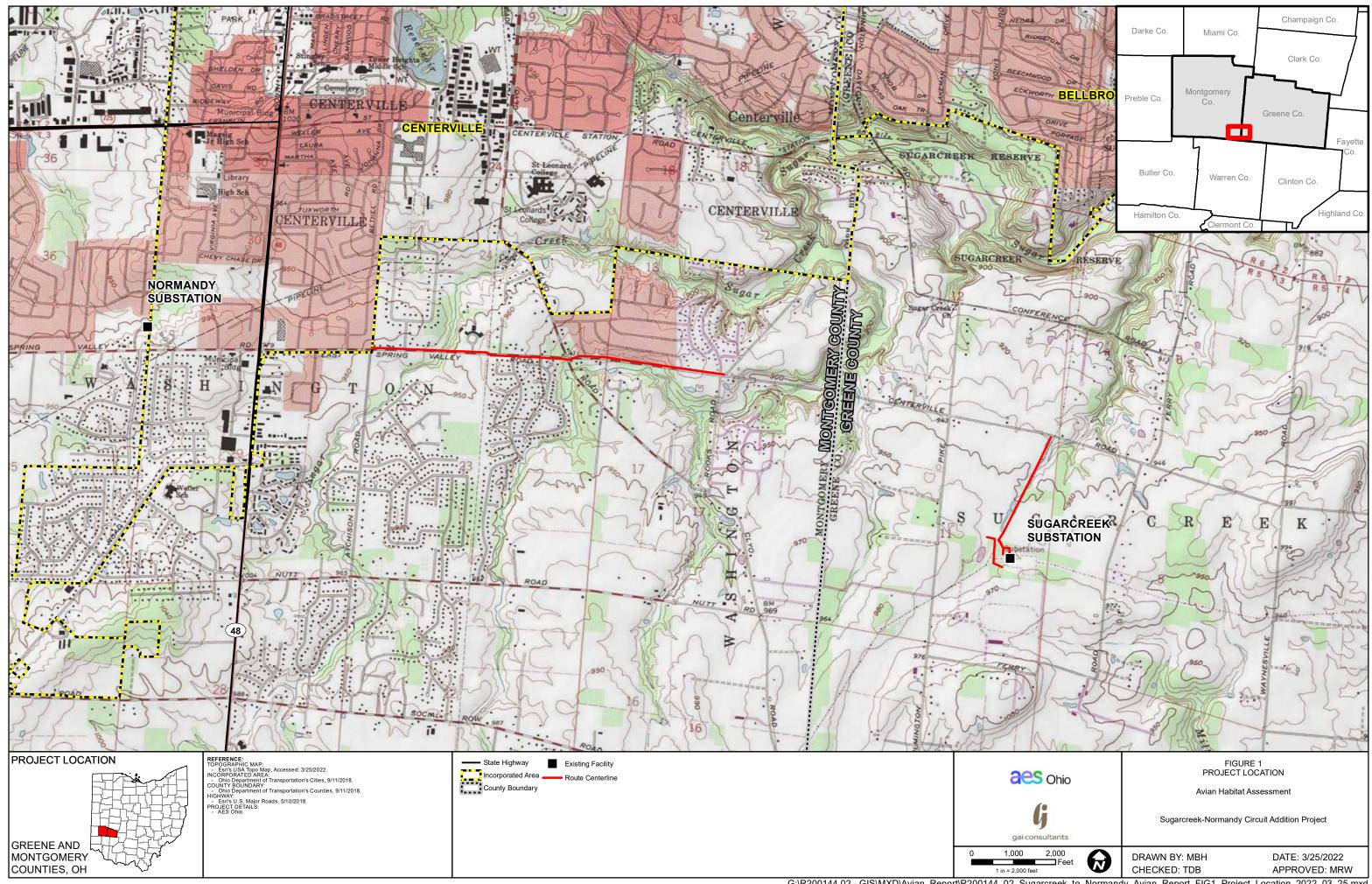


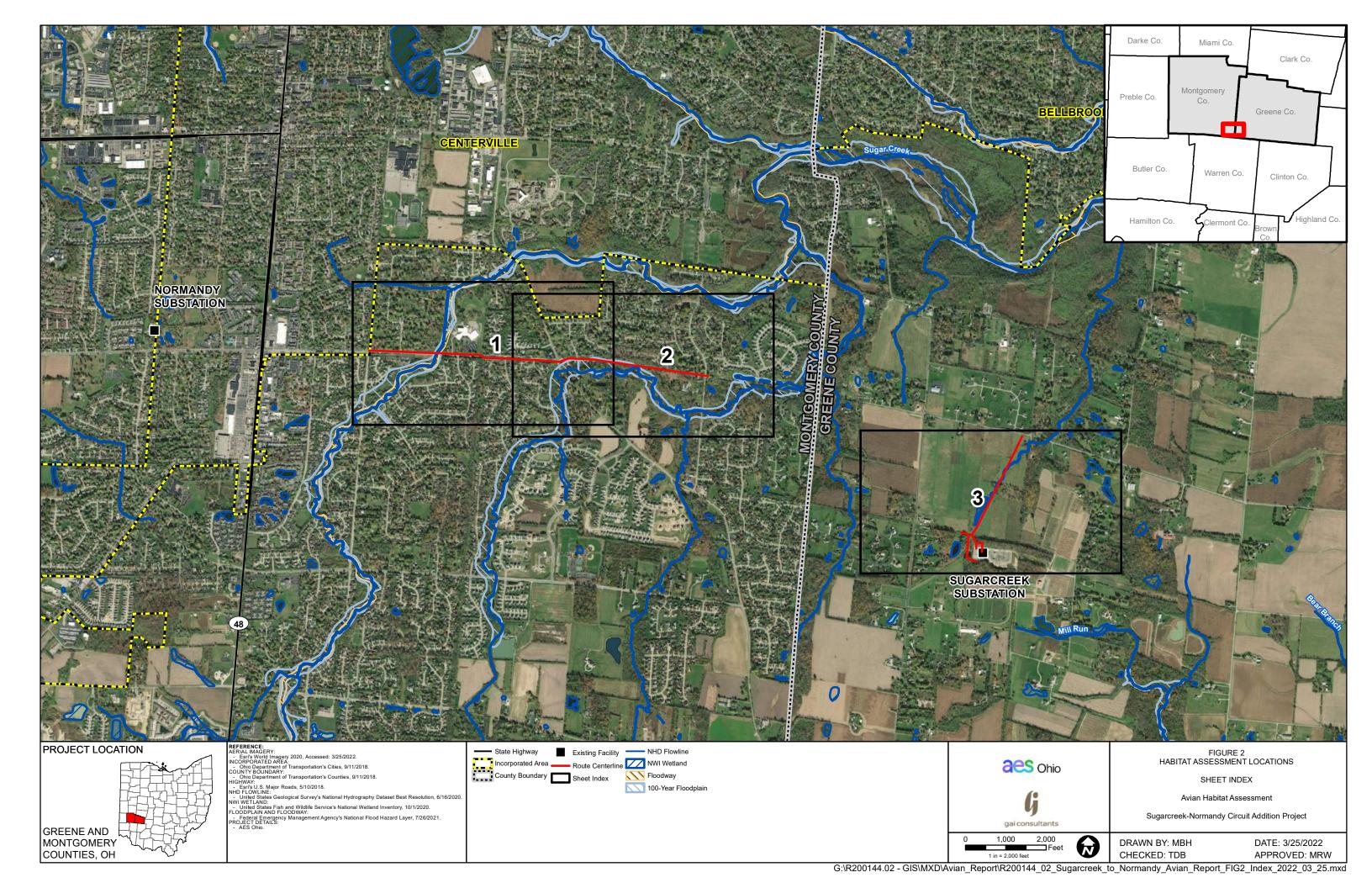
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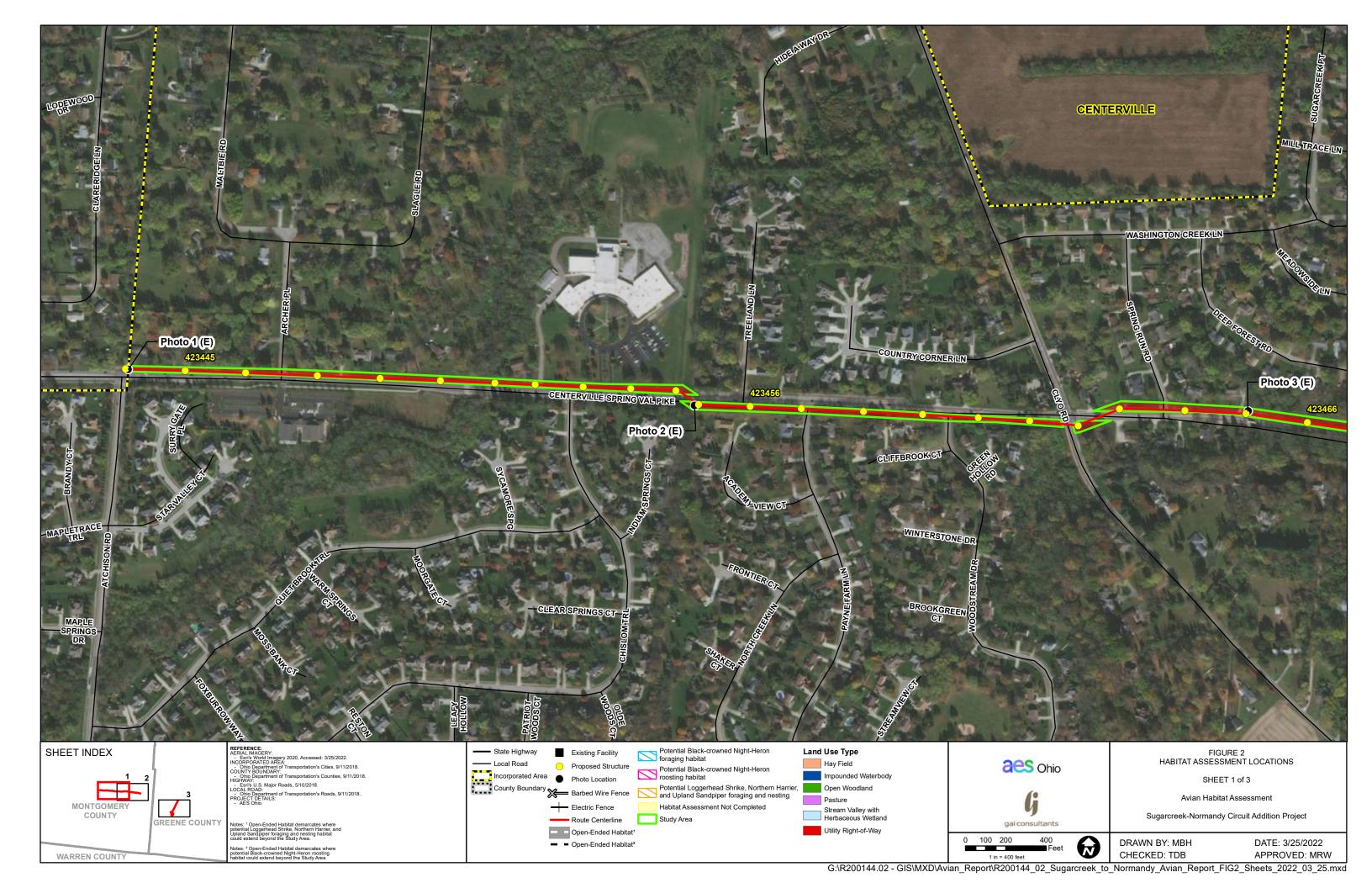


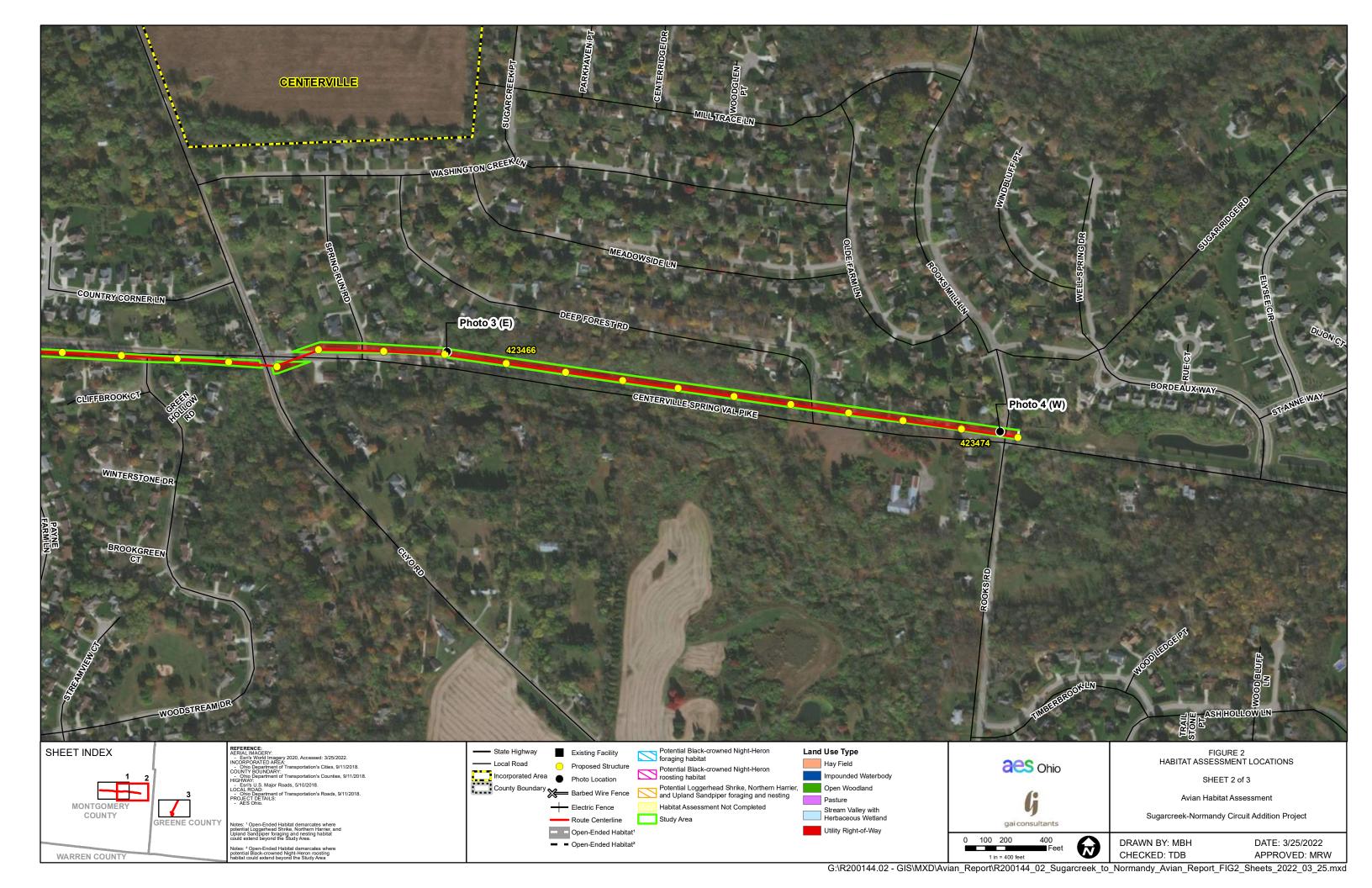
FIGURES

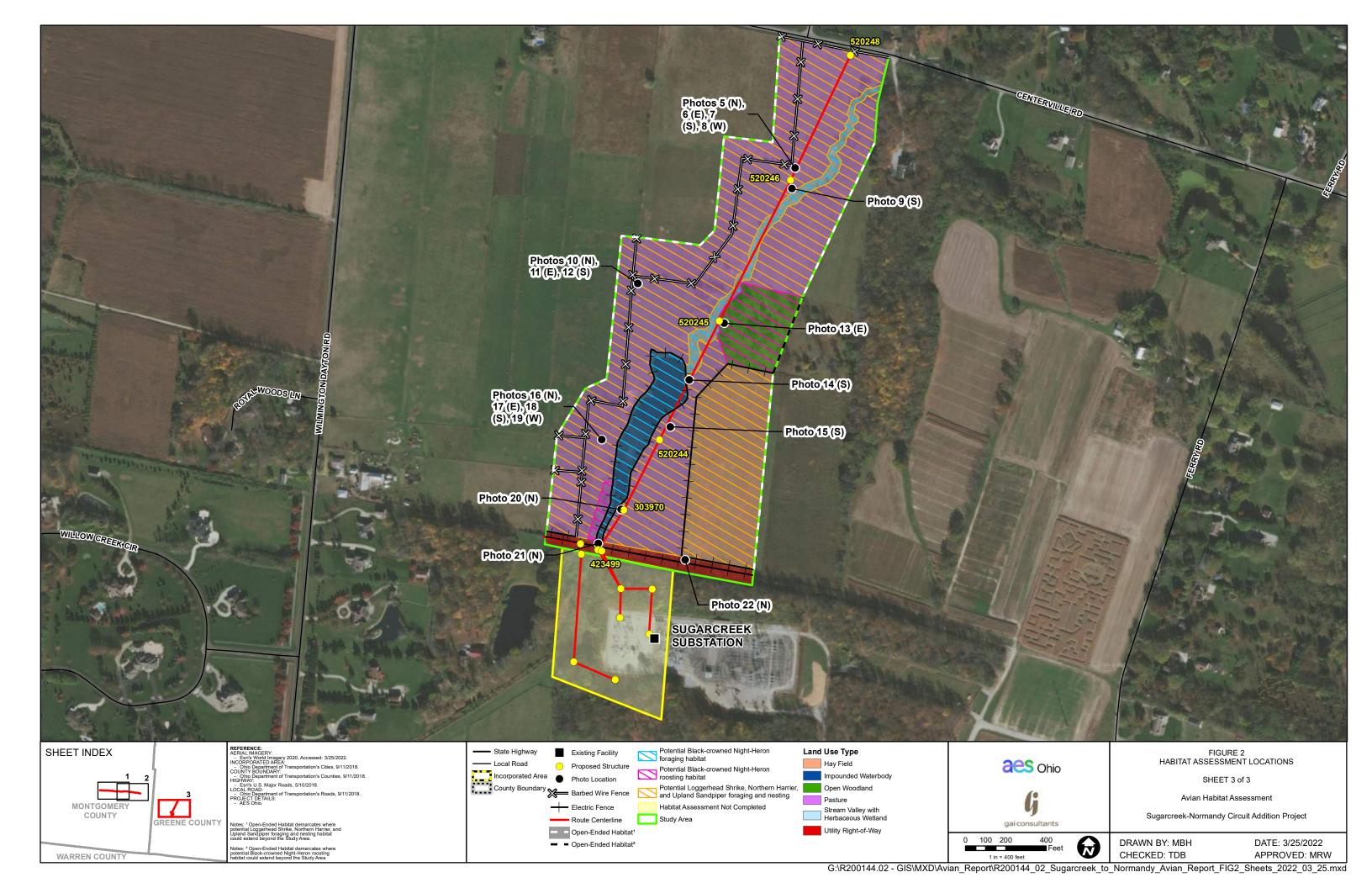












APPENDIX A Ohio Department of Natural Resources Coordination





Ohio Department of Natural Resources

MIKE DEWINE, GOVERNOR

MARY MERTZ, DIRECTOR

Office of Real Estate John Kessler, Chief 2045 Morse Road – Bldg. E-2 Columbus, OH 43229 Phone: (614) 265-6621 Fax: (614) 267-4764

January 11, 2021

Bradley Rolfes GAI Consultants 6000 Town Center Blvd., Suite 300 Canonsburg, PA 15317

Re: 20-1038; DP&L Sugarcreek No. 2 Project

Project: The proposed project involves the rebuild and installation of new and existing 69 kV line spanning approximately 4.85-miles, from the DP&L Sugarcreek Substation

Location: The proposed project is located in Sugarcreek Township, Greene County, Ohio.

The Ohio Department of Natural Resources (ODNR) has completed a review of the above referenced project. These comments were generated by an inter-disciplinary review within the Department. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the National Environmental Policy Act, the Coastal Zone Management Act, Ohio Revised Code and other applicable laws and regulations. These comments are also based on ODNR's experience as the state natural resource management agency and do not supersede or replace the regulatory authority of any local, state or federal agency nor relieve the applicant of the obligation to comply with any local, state or federal laws or regulations.

Natural Heritage Database: The Natural Heritage Database has the following records at or within a one-mile radius of the project area:

Sugarcreek MetroPark – Five Rivers MetroParks

The review was performed on the project area you specified in your request as well as an additional one-mile radius. Records searched date from 1980. This information is provided to inform you of features present within your project area and vicinity.

Please note that Ohio has not been completely surveyed and we rely on receiving information from many sources. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Although all types of plant communities have been surveyed, we only maintain records on the highest quality areas.

Fish and Wildlife: The Division of Wildlife (DOW) has the following comments.

The DOW recommends that impacts to streams, wetlands and other water resources be avoided and minimized to the fullest extent possible, and that best management practices be utilized to minimize erosion and sedimentation.

The entire state of Ohio is within the range of the Indiana bat (Myotis sodalis), a state endangered and federally endangered species, the northern long-eared bat (Myotis septentrionalis), a state endangered and federally threatened species, the little brown bat (Myotis lucifugus), a state endangered species, and the tricolored bat (Perimyotis subflavus), a state endangered species. During the spring and summer (April 1 through September 30), these species of bats predominately roost in trees behind loose, exfoliating bark, in crevices and cavities, or in the leaves. However, these species are also dependent on the forest structure surrounding roost trees. If trees are present within the project area, and trees must be cut, the DOW recommends cutting only occur from October 1 through March 31, conserving trees with loose, shaggy bark and/or crevices, holes, or cavities, as well as trees with DBH \geq 20 if possible. If trees are present within the project area, and trees must be cut during the summer months, the DOW recommends a mist net survey or acoustic survey be conducted from June 1 through August 15, prior to any cutting. Mist net and acoustic surveys should be conducted in accordance with the most recent version of the "OHIO DIVISION OF WILDLIFE GUIDANCE FOR BAT SURVEYS AND TREE CLEARING". If state listed bats are documented, DOW recommends cutting only occur from October 1 through March 31, however, limited summer tree cutting may be acceptable after consultation with DOW (contact Sarah Stankavich, sarah.stankavich@dnr.state.oh.us).

The DOW also recommends that a desktop habitat assessment, followed by a field assessment if needed, is conducted to determine if there are potential hibernaculum(a) present within the project area. Information about how to conduct habitat assessments can be found in the current USFWS "Range-wide Indiana Bat Survey Guidelines." If a habitat assessment finds that potential hibernacula are present within 0.25 miles of the project area, please send this information to Sarah Stankavich, sarah.stankavich@dnr.state.oh.us for project recommendations. If a potential or known hibernaculum is found, the DOW recommends a 0.25-mile tree cutting and subsurface disturbance buffer around the hibernaculum entrance, however, limited summer or winter tree cutting may be acceptable after consultation with DOW. If no tree cutting or subsurface impacts to a hibernaculum are proposed, this project is not likely to impact these species.

The project is within the range of the following listed mussel species:

Federally Endangered clubshell (*Pleurobema clava*) rayed bean (*Villosa fabalis*) snuffbox (*Epioblasma triquetra*)

<u>State Endangered</u> pocketbook (*Lampsilis ovate*)

This project must not have an impact on freshwater native mussels at the project site. This applies to both listed and non-listed species. Per the Ohio Mussel Survey Protocol (2020), all Group 2, 3, and 4 streams (Appendix A) require a mussel survey. Per the Ohio Mussel Survey Protocol, Group 1 streams (Appendix A) and unlisted streams with a watershed of 5 square miles or larger above the point of impact should be assessed using the Reconnaissance Survey for Unionid Mussels (Appendix B) to determine if mussels are present. Mussel surveys may be recommended for these streams as well. This is further explained within the Ohio Mussel Survey Protocol. Therefore, if in-water work is planned in any stream that meets any of the above criteria, the DOW recommends the applicant provide information to indicate no mussel impacts

will occur. If this is not possible, the DOW recommends a professional malacologist conduct a mussel survey in the project area. If mussels that cannot be avoided are found in the project area, as a last resort, the DOW recommends a professional malacologist collect and relocate the mussels to suitable and similar habitat upstream of the project site. Mussel surveys and any subsequent mussel relocation should be done in accordance with the Ohio Mussel Survey Protocol. The Ohio Mussel Survey Protocol (2020) can be found at:

 $\frac{http://wildlife.ohiodnr.gov/portals/wildlife/pdfs/licenses\%20\&\%20permits/OH\%20Mussel\%20Survey\%20Protocol.pdf$

The project is within the range of the channel darter (*Percina copelandi*), a state threatened fish. The DOW recommends no in-water work in perennial streams from April 15 through June 30 to reduce impacts to indigenous aquatic species and their habitat. If no in-water work is proposed in a perennial stream, this project is not likely to impact this or other aquatic species.

The project is within the range of the eastern massasauga (*Sistrurus catenatus*), a state endangered and federally threatened snake species. The eastern massasauga uses a range of habitats including wet prairies, fens, and other wetlands, as well as drier upland habitat. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the Kirtland's snake (*Clonophis kirtlandii*), a state threatened species. This secretive species prefers wet meadows and other wetlands. Due to the location, the type of habitat within the project area, and the type of work proposed, this project is not likely to impact this species.

The project is within the range of the black-crowned night-heron (*Nycticorax nycticorax*), a state-threatened bird. Night-herons are so named because they are nocturnal, conducting most of their foraging in the evening hours or at night, and roost in trees near wetlands and waterbodies during the day. Night herons are migratory and are typically found in Ohio from April 1 through December 1 but can be found in more urbanized areas with reliable food sources year-round. Black-crowned night-herons primarily forage in wetlands and other shallow aquatic habitats, and roost in trees nearby. These night-herons nest in small trees, saplings, shrubs, or sometimes on the ground, near bodies of water and wetlands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 1 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the loggerhead shrike (*Lanius ludovicianus*), a state endangered bird. The loggerhead shrike nests in hedgerows, thickets and fencerows. They hunt over hayfields, pastures, and other grasslands. If thickets or other types of dense shrubbery habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 1 to August 1. If this habitat will not be impacted, this project is not likely to impact this species.

The project is within the range of the northern harrier (*Circus hudsonis*), a state endangered bird. This is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Harriers often nest in loose colonies. The female builds a nest out of sticks on the ground, often on top of a mound. Harriers hunt over grasslands. If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of May 15 to August 1. If this habitat will not be impacted, the project is not likely to impact this species.

The project is within the range of the upland sandpiper (*Bartramia longicauda*), a state endangered bird. Nesting upland sandpipers utilize dry grasslands including native grasslands, seeded grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). If this type of habitat will be impacted, construction should be avoided in this habitat during the species' nesting period of April 15 to July 31. If this type of habitat will not be impacted, this project is not likely to impact this species.

Due to the potential of impacts to federally listed species, as well as to state listed species, we recommend that this project be coordinated with the U.S. Fish & Wildlife Service.

Water Resources: The Division of Water Resources has the following comment.

The local floodplain administrator should be contacted concerning the possible need for any floodplain permits or approvals for this project. Your local floodplain administrator contact information can be found at the website below.

http://water.ohiodnr.gov/portals/soilwater/pdf/floodplain/Floodplain%20Manager%20Community%20Contact%20List 8 16.pdf

ODNR appreciates the opportunity to provide these comments. Please contact Sarah Tebbe, Environmental Specialist, at Sarah.Tebbe@dnr.ohio.gov if you have questions about these comments or need additional information.

Mike Pettegrew
Environmental Services Administrator (Acting)

APPENDIX B Resumes





Matthew B. White, MS

Assistant Environmental Manager

Education

MS, Biology, 2008, Indiana University of Pennsylvania

BS, Wildlife, 2005, Purdue University

Skills

Environmental Permitting

Environmental Investigation, Sampling, Analysis

Wetland Delineation

Threatened and Endangered Species

Certifications / Training

Westmoreland Conservation District Engineers' Workshop, 2012

Wetland Training Institute, Field Indicators of Hydric Soils, 2011

FERC Environmental Review and Compliance for Natural Gas Facilities Seminar, 2010

8-Hour USACE Regional Supplement Wetland Delineation Training, Richard Chinn Environmental Training, 2009

OH Rapid Assessment Method for Wetlands v5.0, 2-day Training Course, OH EPA, 2008

4-day 38-hour USACE Wetland Delineation Training Program, Richard Chinn Environmental Training, 2007

Industry Experience

GAI Consultants, Inc., 2007-Present

Professional Summary

Mr. White is a Project Manager with GAI for energy clients, focusing on linear projects. He specializes in environmental permitting and compliance; wetland delineations and stream identifications; on-site and desktop routing of linear projects; and rare, threatened, and endangered (RTE) species consultations, particularly habitat and presence/absence surveys for birds.

Mr. White has successfully prepared and/or assisted with reports for the approval of Indiana (IN), New York (NY), Ohio (OH), Pennsylvania (PA), and West Virginia (WV), State agencies, the USACE (Baltimore, Buffalo, Huntington, and Pittsburgh Districts), the Federal Energy Regulatory Commission (FERC), the New York Public Service Commission (Article VII), and the Ohio Power Siting Board (OPSB).

Professional Avian Experience

- Upland Sandpiper, an Ohio endangered species, habitat assessments and presence/absence surveys for overhead electric line projects located in various counties in Ohio. Reporting to the Ohio Department of Natural Resources (ODNR) was included in this task. Lead biologist on the tasks.
- Northern Harrier, an Ohio endangered species, habitat assessments and presence/absence surveys for overhead electric line projects located in various counties in Ohio. Reporting to the ODNR was included in this task. Lead biologist on the tasks.
- Lark Sparrow, an Ohio endangered species, habitat assessment for an overhead electric line project located in Hancock and Wood Counties, Ohio. Reporting to the ODNR was included in this task. Lead biologist on the tasks.
- Loggerhead Shrike, a Virginia endangered species, habitat assessments and presence/absence surveys with the use of playbacks for overhead electric line projects located in various counties in Virginia. One project required the development of a habitat management plan. Reporting to the Virginia Department of Inland Game and Fisheries was included in this task. Lead biologist on the tasks.
- Pipeline Project, located in various counties, Missouri and Illinois.
 Lead Biologist, responsible for identifying the Bald Eagle, nest searching, and reporting. Reporting to the USFWS was included.

- Led the nest survey efforts for the Common Raven for an overhead electric transmission line project located in Frederick County, Maryland. Lead biologist for the task.
- Led the field work and reporting for over 80-miles of forest habitat assessment in southwestern PA as part of MBTA consultation with the USFWS. Also analyzed BBA data and the identified forest habitat in the area to assess potential presence of migratory birds. Reporting to the USFWS was included in this task. Lead biologist on the tasks.
- Led the field work for 12-miles of tree cavity and raptor nest surveys along an existing natural gas pipeline right-of-way in Pike County, PA and Orange County, NY as part of MBTA consultation with the USFWS.
 Reporting to the USFWS was included in this task.
- Conducted breeding habitat surveys for several Ohio endangered or threatened avian species along 8.7 miles of replacement natural gas pipeline in Wayne and Summit Counties, OH. Conducted breeding habitat assessments for the Ohio endangered American Bittern, Trumpeter Swan, and Sandhill Crane in Wayne County, OH. Evaluated breeding habitat and conducted presence/absence playback surveys for an Ohio threatened species, the Golden-winged Warbler, in Summit County, OH.

Avian Identification Skills and Experience

- **Point Counts:** Several years of experience independently conducting point counts for a variety of avian species requiring the identification of species through sight and sound.
- **Spot-mapping:** Several years of experience conducting spot-mapping for Cerulean Warbler, Ovenbird, Wood Thrush, Scarlet Tanager, Worm-eating Warbler, Kentucky Warbler, American Redstart, and Hooded Warbler.
- Foraging Observations: Several years of experience collecting foraging observations of Cerulean Warbler.
- Mist-netting and Banding: I have participated in several mist-netting and banding events.
- Nest Searching: Cerulean Warbler In two years I independently located and monitored 35 Cerulean
 Warbler nests. The Cerulean Warbler is considered to be the one of most difficult species to nest search for
 in eastern North America.

Relevant Coursework

- M.S. Biology, 2008, Indiana University of Pennsylvania, Indiana, Pennsylvania
 - Thesis: Avian Communities Response to Silvicultural Treatments in Eastern Kentucky: With an Emphasis on Cerulean Warbler Ecology
 - Relevant Coursework: Animal Ecology mist-netting
 - Field Crew Manager at the Cerulean Warbler Technical Group Silviculture Study in Salt Lick, Kentucky, responsible for hiring, training and managing a three-person crew. Responsible for data entry and data management and conducted research for the regional project. Conducted point counts, spot-mapping, foraging observations, habitat data collection, and can consistently and independently locate Cerulean Warbler nests.
- B.S. Wildlife, 2005, Purdue University, West Lafayette, Indiana
 - Relevant Coursework
 - Ecology and Systematics of Amphibians, Reptiles, and Birds
 - Laboratory in Ecology and Systematics of Amphibians, Reptiles, and Birds (sight and sound identification)
 - Natural Resource Practicum mist-netting, field identification (sight and sound)
 - Wildlife Investigation Techniques avian field identification skills, avian nest construction, waterfowl wing identification
 - Advanced Ornithology

- Confidential Wind Farm Project, compensatory wetland mitigation monitoring, Tioga Co., PA. Task Manager. Lead USACE/PaDEP monitoring events and reporting.
- Pipeline Project 2017 Sites, located in Braxton, Hardy, Pendelton, and Randolph Counties, WV. Project Manager with tasks including, stream identification and wetland delineation, construction storm water erosion and sediment control plans and permitting, WVDNR OLS Stream Activity Applications, Monongahela National Forest Standard Use Permit Application, USACE NWP3 PCN, and preparation of Environmental Management and Construction Plans.
- Hydrostatic Test Project and Casing Removal Project. Project Manager. As applicable, completed
 environmental stream and wetland surveys, rare, threatened and endangered species consultations, and
 construction storm water permitting. Also provided a permit approval and clearance package for each
 project.
- Pipeline Project, Susquehanna County, PA. Project Manager for multiple pipeline project.
- Natural Gas Pipeline Project (9.5 miles of pipeline) in Broome County, NY. Project Manager. Successfully led project teams to complete stream and wetland delineations and reporting, soil fertility testing and reporting, and invasive species surveys and reporting. Led project teams in obtaining state and federal RTE species clearance as well as cultural resource clearance from the State Historic Preservation Office. Led development of Project's USACE NWP-12 Pre-Construction Notification and the Article VII Application Submitted to the NY Public Service Commission. Provided oversight to the Project's State Pollution Discharge Elimination System (SPDES) Construction Stormwater permit application.
- Propane Pipeline Project in Brooke, Marshall, and Ohio Counties, WV, Field Coordinator for an approximately 57-mile pipeline project. Assisted with USFWS WV Field Office and WVDNR agency consultation, including Indiana bat habitat assessment and maternity roost survey reports, mussel survey coordination, Running Buffalo Clover surveys and report, and Henslow's and Grasshopper Sparrow consultation. Prepared USACE NWP-12 PCN Application to USACE Pittsburgh District and Stream Activity Applications to WVDNR OLS.
- Pipeline Project in Allegheny, Greene, Washington, and Westmoreland Counties, PA, and Barbour, Doddridge, Harrison, Kanawha, Marshall, and Wetzel Counties, WV. Project included approximately 110 miles of pipeline, four new compressor stations, and associated ancillary facilities. Conducted and led wetland delineation and stream identification field work and report preparation. Assisted with FERC documentation and agency consultation. During construction, assisted with project modifications, field work coordination, agency consultation, and permit updates.
- Transmission Line Project in Livingston and Wyoming Counties, NY, and Potter County, PA. Conducted wetland delineation and stream identification field work and report preparation. Prepared the Projects Environmental Resource Report documents for submission to the FERC. Also prepared USACE/NYSDEC Joint Permit Application for waterbodies and wetlands for the Project and assisted with federal and state agency consultation.
- Wetland delineations and waterbody identifications for projects located in Frederick County, MD; Franklin, Allegheny, and Westmoreland Counties, PA; and Chemung, Tompkins, and Stueben Counties, NY.
- Natural gas pipeline replacement, Kanawha and Clay Counties, WV. Conducted environmental surveys for streams and wetland delineations along 27 miles of replacement natural gas pipeline and 60 miles of access roads.
- Gas Line Replacement, Orange County, NY. Conducted environmental surveys, including the delineation of NYSDEC regulated wetlands, and prepared permit applications. Prepared necessary documentation for a NYSDEC Freshwater Wetland Permit and SPDES Stormwater Permit. Also assisted with agency consultation regarding threatened and endangered species.

- Multiple Pipeline Replacement Projects. Conducted dozens of environmental surveys and prepared their corresponding permit applications (PaDEP Chapter 105 GP-5 and GP-8, and Joint Permit Applications).
- Underground Gas Storage Expansion Project. Conducted environmental surveys for field work including identifying various environmental features such as wetlands, streams, residences, water supply wells, and other natural features. Assisted FERC Environmental Resource Report and Environmental Assessment documentation and the Projects USACE PCN NWP-3 and NWP-12 Application. Received an OH Department of Natural Resources (ODNR), Division of Wildlife Wild Animal Permit (Scientific Collection) for activities relating to the Migratory Bird Treaty Act and Project compliance; designated sub-permittee under a Federal Fish and Wildlife Permit (Special Purpose Utility) for activities relating to the Migratory Bird Treaty Act and Project compliance.

Publications

- Sheehan, J., P. B. Wood, D. A. Buehler, P. D. Keyser, J. L. Larkin, A. D. Rodewald, T. B. Wigley, T. J. Boves, G. A. George, M. H. Bakermans, T. A. Beachy, A. Evans, M. E. McDermott, F. L. Newell, K. A. Perkins, and M. White. 2014. *Avian response to timber harvesting applied experimentally to manage Cerulean Warbler breeding populations.* Forest Ecology and Management Volume 321: 5-18. Available at http://dx.doi.org/10.1016/j.foreco.2013.07.037
- Wood, P.B., J. Sheehan, P. Keyser, D. Buehler, J. Larkin, A. Rodewald, S. Stoleson, T.B. Wigley, J. Mizel, T. Boves, G. George, M. Bakermans, T. Beachy, A. Evans, M. McDermott, F. Newell, K. Perkins, and M. White. 2013. *Management guidelines for enhancing Cerulean Warbler breeding habitat in Appalachian hardwood forests*. American Bird Conservancy. The Plains, VA. 28pp.
- Newell, F.L., J. Sheehan, P.B. Wood, A.D. Rodewald, D.A. Buehler, P.D. Keyser, J.L. Larkin, T.A. Beachy, M. H. Bakermans, T. J. Boves, A. Evans, G. A. George, M. E. McDermott, K. A. Perkins, M. White, and T. B. Wigley. 2013. *Comparison of point counts and territory mapping for detecting effects of forest management on songbirds*. Journal of Field Ornithology Volume 84(3): 270-286
- Boves, T.J., D.A. Buehler, J. Sheehan, P.B. Wood, A.D. Rodewald, J.L. Larkin, P.D. Keyser, F.L. Newell, G.A. George, M.H. Bakermans, A. Evans, T.A. Beachy, M.E. McDermott, K.A. Perkins, M. White, and T.B. Wigley. 2013. *Emulating natural disturbances for declining late-successional species: A case study of the consequences for cerulean warblers (Setophaga cerulea)*. PLoS ONE 8(1): e52107. doi:10.1371/journal.pone.0052107
- Larkin, J. L., P. B. Wood, T. J. Boves, J. Sheehan, D. A. Buehler, P.D. Keyser, A. D. Rodewald, T. A. Beachy, M. H. Bakermans, A. Evans, G. A. George, M. E. McDermott, F. L. Newell, K. A. Perkins, M. White, and T. B. Wigley. 2012. *Breeding season concerns and response to forest management: Can forest management produce more breeding birds?* Ornitologia Neotropical 23: 283-287

Presentations

- White, Matthew B. Avian Communities Response to Silvicultural Treatments in Eastern Kentucky: With an Emphasis on Cerulean Warbler Ecology. Indiana University of Pennsylvania, Indiana, PA (Master's Thesis).
- 2007 White, Matthew B. *Wildlife Ecology, Conservation, and Management From Big to Small.* Indiana University of Pennsylvania, Indiana, PA.
- 2006 White, Matthew B. Avian Communities Occupying Managed Stands in The Daniel Boone National Forest 13-Years Post-harvest. Society of American Forester's National Convention, Pittsburgh, PA.

Poster Presentations

White, Matthew B. Avian Communities Occupying Managed Stands in The Daniel Boone National Forest 13-Years Post-harvest. Indiana University of Pennsylvania, Indiana, PA.

White, Matthew B. *IUP Wildlife Research: Taking the Lead.* Indiana University of Pennsylvania, Indiana, PA.

Awards and Activities

- Indiana University of Pennsylvania Graduate Research Award 2007
- American Ornithologists Union Student Membership Award 2006
- Indiana University of Pennsylvania Ornithological Museum Curator, Fall 2005 Fall 2007
- Indiana University of Pennsylvania Graduate Merit Scholarship 2005 2006 Academic year
- Indiana University of Pennsylvania Graduate Assistantship Fall 2005 Spring 2007
- Purdue University Undergraduate Teaching Assistant Laboratory in Ecology and Systematics of Amphibians, Reptiles, and Birds – Bird Portion, 2005
- Purdue University Department Forestry and Natural Resources Volunteer Bird Taxidermist

Enclosure 3 Avian Habitat Assessment Submission Letter to Ohio Department of Natural Resources





March 25, 2022 GAI Project R200144.07, Task 001

Ms. Sarah Tebbe Environmental Specialist Ohio Department of Natural Resources

Submitted Electronically Sarah. Tebbe@dnr.ohio.gov

The Dayton Power and Light Company d/b/a AES Ohio Sugarcreek-Normandy Circuit Addition Project ODNR Reference Number 20-1038 PUCO Case No. 21-0496-EL-BLN

Dear Ms. Tebbe:

In support of The Dayton Power and Light Company d/b/a AES Ohio's ("AES Ohio") Sugarcreek-Normandy Circuit Addition Project ("Project") we previously corresponded with your office regarding state threatened and endangered species. In a letter dated January 11, 2021 (ODNR Reference Number 20-1038), the ODNR identified that the Project is within the range of the Black-crowned Night-Heron (*Nycticorax nycticorax*), a state threatened bird, Loggerhead Shrike (*Lanius ludovicianus*), a state endangered bird, Northern Harrier (*Circus hudsonius*), a state endangered bird, and the Upland Sandpiper (*Bartramia longicauda*), a state endangered bird.

In anticipation of Project construction activities (e.g., vegetation clearing, timber mat placement, structure removal and installation, etc.) to occur during the nesting period of one or more of the avian species, AES Ohio requested GAI Consultants, Inc. ("GAI") complete an avian habitat assessment for the Project's Ohio Power and Siting Board ("OPSB") jurisdictional facilities. The Project received authorization from the OPSB in Case No. 21-0496-EL-BLN.

Enclosed is the completed Avian Habitat Assessment report ("Report"). The Report concludes that Project components along Centerville Spring Road is not considered potential nesting, foraging, and/or roosting habitat, as applicable, for the four state-listed avian species. The Report also concludes that Project components from Centerville Road south to proposed Structure 423499 is considered potential nesting, foraging, and/or roosting habitat, as applicable, for the four state-listed avian species.

AES Ohio plans to mitigate potential impacts to these avian species by:

- Black-crowned Night-Heron
 - Foraging habitat Aquatic resources, including the stream valley and emergent vegetation and impounded waterbody, are not planned to be impacted by the Project nor during the species nesting period of April 1 to August 1.
 - Roosting habitat Trees in the open woodland and at the southwestern corner of the impounded waterbody will not be cut during the species nesting period of April 1 to August 1.
- Loggerhead Shrike
 - Foraging and nesting habitat Woody vegetation, including multiflora rose and Osage orange, barbed wire fences and associated vegetation and hedgerows in pasture will not be cut or disturbed during the species nesting period of April 1 to August 1. The identified hay fields are in the Report's Study Area but are located outside the Project's planned limits of disturbance.
- Northern Harrier and Upland Sandpiper
 - Foraging and nesting habitat Timber mats will be used in pasture for access to existing and proposed structures and for construction equipment to work from. The identified hay fields are in the Report's Study Area but are located outside the Project's planned limits of disturbance. Timber mats in pasture

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GAI Project R200144.07, Task 001

Page 2

are planned to be installed and removed outside the combined nesting period, April 15 to August 1, for the Northern Harrier and Upland Sandpiper. Therefore, herbaceous vegetation disturbance in pasture during the combined nesting period would be limited to an approximate area of 20 feet by 20 feet where existing wood H-frame structures are planned to be replaced with steel monopoles at or near the location of the existing structures. The five proposed structures are shown on the Report's Figure 2, Sheet 3. To mitigate potential impacts to the ground nesting Northern Harrier and Upland Sandpiper at each of the structure locations, AES Ohio plans to employ the Project's environmental compliance monitor to review the ground vegetation for nests immediately prior to disturbance. The review would be documented in that day's monitoring records. Should a nest be identified, vegetation disturbance activities would not proceed and the ODNR would be contacted for further guidance.

GAI and AES Ohio request your concurrence on the enclosed Avian Habitat Assessment report and the proposed mitigation measures presented herein. Please contact me at 317.436.4833 or via email at m.walters@gaiconsultants.com if you have questions or require further information.

Sincerely,

GAI Consultants, Inc.

Marc Walters Senior Environmental Manager

MW/Imt

Enc.: Avian Habitat Assessment, dated March 2022

cc: Amanda Foti, The AES Corporation

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Enclosure 4 Ohio Department of Natural Resources Informal Correspondence Letter



From: Nathan.Reardon@dnr.ohio.gov Sent: Wednesday, March 30, 2022 7:59 AM

To: Tvler Rankin

Cc: sarah.tebbe@dnr.ohio.gov; Matt White; Marc Walters; Amanda Foti Subject:

RE: ODNR Reference No: 20-1038 - Sugarcreek - Normandy Circuit Addition

Project

Follow Up Flag: Follow up Flag Status: Flagged

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Hi Tyler,

Thank you for providing the Avian Habitat Assessment report. The DOW concurs that suitable habitat for state listed birds does not exist along the portion of the project that parallels Centerville Spring Valley Road. The DOW also concurs that suitable does exist south of Centerville Road. However, I was not able to find the proposed mitigative measures. The expectation would be to avoid any suitable habitat during the respective nesting seasons or conduct presence/absence surveys. I did notice that in some of the photos there was timber matting in place. If the timber matting is in place prior to the nesting seasons and construction activity is confined to the matting, this also would be considered a mitigative measure. If there are any questions, please let me know.

Thank you, Nathan



Nathan Reardon Compliance Coordinator ODNR Division of Wildlife

2045 Morse Road Columbus, OH 43229 Phone: 614-265-6741

Email: nathan.reardon@dnr.ohio.gov

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From: Tebbe, Sarah < <u>sarah.tebbe@dnr.ohio.gov</u>>

Sent: Monday, March 28, 2022 1:04 PM

To: Reardon, Nathan < <u>Nathan.Reardon@dnr.ohio.gov</u>>

Cc: T.Rankin@gaiconsultants.com; m.white@gaiconsultants.com; M.Walters@gaiconsultants.com;

amanda.foti@aes.com

Subject: FW: ODNR Reference No: 20-1038 - Sugarcreek - Normandy Circuit Addition Project

Hi Nate,

Please see below and attached, and let us know if DOW concurs, or has any concerns on the subject project's habitat assessment findings.

Thanks,

Sarah Tebbe
Ohio Department of Natural Resources
REALM Office of Environmental Services
2045 Morse Road
Columbus, Ohio 43229
(614) 265-6397



From: Tyler Rankin < T.Rankin@gaiconsultants.com >

Sent: Monday, March 28, 2022 12:42 PM **To:** Tebbe, Sarah <<u>sarah.tebbe@dnr.ohio.gov</u>>

Cc: Matt White <m.white@gaiconsultants.com>; Marc Walters <M.Walters@gaiconsultants.com>;

Amanda Foti <amanda.foti@aes.com>

Subject: ODNR Reference No: 20-1038 - Sugarcreek - Normandy Circuit Addition Project

Hi Sarah,

In support of the AES Ohio Sugarcreek-Normandy Circuit Addition Project, we previously corresponded with your office regarding state threatened and endangered species. In a letter dated January 11, 2021 (ODNR Reference Number 20-1038, attached), the ODNR identified that the Project is within the range of the four state listed bird species. This project is authorized by the Ohio Power Siting Board (Case No. 21-0496-EL-BLN).

In anticipation of Project construction activities (e.g., vegetation clearing, timber mat placement, structure removal and installation, etc.) to occur during the nesting period of one or more of the avian

species, AES Ohio requested GAI Consultants, Inc. complete an avian habitat assessment for the Project's OPSB jurisdiction components. Attached is the completed Avian Habitat Assessment Report. GAI and AES Ohio are requesting concurrence on the findings and mitigation recommendations in the attached report in order to satisfy OPSB conditional requirements.

Please let me know if you have any questions or concerns.

Thank you, Tyler

Tyler E. Rankin, MS, CNRP

Senior Project Environmental Specialist

GAI Consultants, 11 Spiral Drive, Suite 8, Florence, KY 41042

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4/13/2022 10:45:13 AM

in

Case No(s). 21-0496-EL-BLN

Summary: Notification of ODNR Correspondence for Sugarcreek- Normandy Circuit Addition Project electronically filed by Ms. Sarah Howdeshelt on behalf of The Dayton Power and Light Company