

Positive indicators of wetland hydrology included water stained leaves and drift deposits. Dominant vegetation consisted of hydrophytic vegetation such as: reed canary grass (*Phalaris arundinacea*: FACW), sedges (*Carex sp.*: FACW), eastern cottonwood (*Populus deltoides*: FAC), and black willow (*Salix nigra*: OBL). Using ORAM version 5.0, Wetland O obtained a score of 20.5, which correlates to a Category 1 wetland.

Based on location and hydrologic connection to a USGS blue line stream, it appears Wetland O would be considered jurisdictional (non-isolated) by USACE.

3.3 Stream Assessment

Eighteen stream crossings were identified on the Site (Figure 3). The streams were evaluated using one of two Ohio EPA methods. Any stream that had a pool depth greater than 40 cm deep or with a watershed of over one square mile was evaluated using the Qualitative Habitat Evaluation Index (QHEI). Smaller streams with a pool depth less than 40 cm deep or a watershed less than one square mile were evaluated using the Primary Headwater Habitat Evaluation Form (HHEI). Based on USGS StreamStats and field observations, stream crossings were determined to be ephemeral or intermittent/perennial. Stream assessment data forms are included in Appendix C. Five non-jurisdictional roadside ditch crossings were identified. They were determined to be constructed storm water features, and therefore not evaluated using QHEI or HHEI methods.

Table 3.3 Summary of Streams

Stream Crossing	Drainage Area (mi ²)	Evaluation Method	Score	PHWH Stream Class	QHEI Narrative Rating	Ephemeral vs. Intermittent/Perennial
SC-1	0.04	HHEI	27	Modified Class I PHWH	N/A	intermittent/perennial
SC-2	0.08	HHEI	22	Modified Class I PHWH	N/A	ephemeral
SC-3	0.15	HHEI	27	Modified Class I PHWH	N/A	ephemeral
SC-4	3.83	QHEI	31	N/A	Poor	intermittent/perennial
SC-5	<1.0	HHEI	30	Modified Class II PHWH	N/A	ephemeral
SC-6	5.04	QHEI	26.5	N/A	Very Poor	intermittent/perennial
SC-7	7.21	QHEI	37	N/A	Poor	intermittent/perennial
SC-8	0.26	HHEI	64	Modified Class II PHWH	N/A	ephemeral
SC-9	8.54	QHEI	41	N/A	Poor	intermittent/perennial
SC-10	0.19	HHEI	37	Modified Class II PHWH	N/A	ephemeral
SC-11	0.10	HHEI	54	Modified Class II PHWH	N/A	ephemeral
SC-12	10.2	QHEI	32.5	N/A	Poor	intermittent/perennial
SC-13	0.03	HHEI	27	Modified Class I PHWH	N/A	ephemeral
SC-14	0.40	HHEI	52	Modified Class II PHWH	N/A	intermittent/perennial
SC-15	1.75	QHEI	32	N/A	Poor	intermittent/perennial
SC-16	1.89	QHEI	32	N/A	Poor	intermittent/perennial
SC-17	3.56	QHEI	41	N/A	Poor	intermittent/perennial
SC-18	0.04	HHEI	28	Modified Class I PHWH	N/A	intermittent/perennial

3.4 Threatened and Endangered Species

A preliminary coordination notification letter was sent by the Utility Technologies International (UTI) to USFWS and ODNR on February 3, 2014 (Appendix E). This letter provided an introduction to the project—including a description of the project and general locational information. USFWS responded to the UTI letter on February 25, 2014. The response letter is included in Appendix E. USFWS indicated that the project is not located near designated wilderness areas or Critical habitat. USFWS recommended best construction techniques to minimize erosion and mulching and re-vegetating all disturbed areas with native plants. ODNR Responded to the letter on March 11, 2014 (Appendix E). ODNR also recommended best management practices to prevent erosion and avoidance of streams and wetlands whenever possible. A table summarizing USFWS and ODNR listed species comments is included in Appendix E.

Table 3.4 Summary of State and Federally Listed Species Comments

Common Name	Scientific Name	State or Federal	Listing	Discuss Presence of Suitable Habitat
American bittern	<i>Botaurus lentiginosus</i>	State	Endangered	Nesting bitterns prefer large undisturbed wetlands that have scattered small pools amongst dense vegetation. They occasionally occupy bogs, large wet meadows, and dense shrubby swamps. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
bald eagle	<i>Haliaeetus leucocephalus</i>	Federal	Bald & Golden Eagle Protection Act	Two bald eagle nests are located within the project buffer in Wood County. Based on our ecological surveys, no specimens were identified but suitable habitat was recognized. Additionally, no bald eagle nests are located within 660 feet of the project corridor.
black tern	<i>Chlidonias niger</i>	State	Endangered	The black tern prefers large, undisturbed inland marshes with fairly dense vegetation and pockets of open water. They nest in various kinds of marsh vegetation, but cattail marshes are generally favored. Nests are built on top of muskrat houses or on top of floating vegetation. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Blanding's turtle	<i>Emydoidea blandingii</i>	State	Threatened	ODNR Natural Heritage Database revealed that the Blanding's turtle is known to occur within one mile of the project route. The Blanding's turtle is known to utilize lakes, ponds, marshes, bogs, swamps, creeks, ditches, wet prairies, and sloughs. In addition, they may use multiple aquatic habitats throughout the year, and may make long over-land migrations to reach isolated wetlands or travel through ditches and channels. Based on our ecological surveys, no specimens were identified and wetlands located within the project corridor did not contain suitable habitat. Therefore, the project will not impact this species.

blue-spotted salamander	<i>Ambystoma laterale</i>	State	Endangered	The blue-spotted salamander prefers damp forested areas. During the spring, the blue-spotted salamander will utilize wet prairies and vernal pools for breeding. According to ODNR, they appear to be limited to areas of sandy soils, such as the Oak Openings Region. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Canada darner dragonfly	<i>Aeshna canadensis</i>	State	Endangered	The Canada darner dragonfly inhabits both terrestrial and freshwater environments, including bogs, beaver ponds, lakes and other freshwater areas with abundant forest vegetation. According to ODNR correspondence, this project is not likely to impact this species due to the location and the type of habitat along the project route.
common tern	<i>Sterna hirundo</i>	State	Endangered	The common tern prefers nesting sites of natural or man-made islands that are free of mammalian predators and human disturbance. Common terns are also known to utilize mainland beaches and dredge disposal sites when islands are unavailable. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
eastern massasauga	<i>Sistrurus catenatus</i>	State & Federal	Endangered (OH), federal candidate	The eastern massasauga uses both wetland and upland habitat depending upon the season. Adjoining lowland and upland habitat with variable elevations between are critical for the species to travel back and forth seasonally.
eastern prairie fringed orchid	<i>Platanthera leucophaea</i>	Federal	Threatened	The eastern prairie fringed orchid is found in wet prairies, sedge meadows, and moist road-side ditches. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
frosted elfin butterfly	<i>Incisalia irus</i>	State	Endangered	The frosted elfin butterfly is dependent on prairie vegetation found in oak savanna habitat. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Hine's emerald dragonfly	<i>Somatochlora hineana</i>	State & Federal	Endangered	Hine's emerald dragonfly is found in areas with tiny rivulets flowing through wetlands over dolomite or limestone soils. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Indiana bat	<i>Myotis sodalis</i>	State & Federal	Endangered	Indiana bat habitat consists of suitable trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. Based on our ecological surveys, eighteen trees suitable for roosting for the Indiana bat were identified. Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.

Karner blue butterfly	<i>Lycaeides melissa samuelis</i>	State & Federal	Endangered	The Karner blue butterfly is dependent on prairie vegetation found in oak savanna habitat. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
King rail	<i>Rallus elegans</i>	State	Endangered	The king rail's nests are deep bowls constructed out of grass and typically well hidden in marsh vegetation. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Kirtland's warbler	<i>Setophaga kirtlandii</i>	State & Federal	Endangered	The Kirtland's warbler utilizes scrub/shrub and forested areas located within three miles of the shoreline of Lake Erie as stopover habitat during migration. Based on our ecological surveys, two scrub/shrub wetlands identified in the project corridor are within three miles of the Lake Erie shoreline. According to USFWS guidelines, clearing of suitable habitat may not occur from April 22- June 1 or from August 15- October 15.
Lark sparrow	<i>Chondestes grammacus</i>	State	Endangered	The lark sparrow nests in grassland habitats with scattered shrub layers, disturbed open areas, as well as patches of bare soil. Based on our ecological surveys, seven areas containing prairie habitat were identified in the project corridor. According to ODNR guidelines, construction may not occur in this habitat during the species' nesting period of May 1 to June 30.
Loggerhead shrike	<i>Lanius ludovicianus</i>	State	Endangered	The loggerhead shrike prefers grassland and prairie habitat. Based on our ecological surveys, seven areas containing prairie habitat were identified in the project corridor. According to ODNR guidelines, construction may not occur in this habitat during the species' nesting period of April 1 to August 1.
Northern harrier	<i>Circus cyaneus</i>	State	Endangered	The northern harrier is a common migrant and winter species. Nesters are much rarer, although they occasionally breed in large marshes and grasslands. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Northern long-eared bat	<i>Myotis septentrionalis</i>	Federal	Proposed Endangered	Northern long-eared bat habitat consists of suitable trees that include dead and dying trees with exfoliating bark, crevices, or cavities in upland areas or riparian corridors and living trees with exfoliating bark, cavities, or hollow areas formed from broken branches or tops. Based on ecological surveys, eighteen trees with suitable roosting habitat for the northern long-eared bat were identified. Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.
Persius dusky wing butterfly	<i>Erynnis persius</i>	State	Endangered	The Persius dusky wing butterfly is dependent on the prairie vegetation found in oak savanna habitat. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Piping plover	<i>Charadrius melodus</i>	State & Federal	Endangered	The piping plover utilizes sand beach habitat along the Lake Erie shoreline during spring and fall migration. Based

				on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Purplish copper butterfly	<i>Lycaena helloides</i>	State	Endangered	The purplish copper butterfly inhabits a variety of disturbed moist areas, such as fallow fields with poor drainage, sedge meadows, wet prairies, wet ditches and low, damp areas in cultivated fields. According to ODNR, this project is not likely to impact this species due to the habitat used by this species and the type of work proposed.
Rayed bean	<i>Villosa fabalis</i>	State & Federal	Endangered	The rayed bean is generally found in smaller, headwater creeks, but is sometimes found in large rivers and wave-washed areas of glacial lakes. It prefers gravel or sand substrates. According to USFWS, no significant impacts are expected due to the project location, onsite habitat, and avoidance of most stream impacts.
Rufa red knot	<i>Calidris canutus rufa</i>	Federal	Proposed Threatened	The rufa red knot utilizes sand beach habitat along the Lake Erie shoreline during spring and fall migration. Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.
Upland sandpiper	<i>Bartramia longicauda</i>	State	Endangered	Upland sandpipers utilize dry grasslands for nesting habitat. Dry grasslands include native grasslands, grazed and ungrazed pasture, hayfields, and grasslands established through the Conservation Reserve Program (CRP). Based on our ecological surveys, no specimens were identified and suitable habitat was not recognized. Therefore, the project will not impact this species.

Prior to field activities, MSG personnel identified areas where sensitive habitats could be present on aerial photographs. Field reconnaissance was performed July 30-31, August 6-7, 14-15 and 19-20, 2014 to determine if such habitats were present or immediately adjacent to the planned route of construction. If habitats were encountered in the field, MSG personnel flagged the habitat, took representative photographs and utilized a hand-held GPS unit, if possible to record the location (see Figure 3). A total of 18 potential Indiana bat trees were identified as well as seven areas of prairie habitat (see Table 3.5 below). More specifically the Prairie Habitats (PH) 1-4 are located in industrial areas and therefore are only potentially suitable habitats for the listed endangered species due to being high disturbance areas. In addition, Wetlands M and N contain suitable stopover habitat for the Kirtland's warbler since the wetlands are within 3 miles of Lake Erie.

Table 3.5 Summary of Threatened and Endangered Species Habitat Identified

Feature ID	Feature Type	Species of Concern	Mitigation	Description
BT-1	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS conditions, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Understory is a mix of hackberry and upland shrubs and grasses
BT-2	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Hackberry (<i>Celtis occidentalis</i>) with cavities. Understory is a mix of hackberry and upland shrubs and grasses.
BT-3	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if	Dead green ash (<i>Fraxinus pennsylvanica</i>) with peeling bark and cavities. Understory

Feature ID	Feature Type	Species of Concern	Mitigation	Description
			construction has not begun by March 31.	consisted of gray dogwood, prairie cordgrass (<i>Spartina pectinata</i>) and reed canary grass (<i>Phalaris arundinacea</i>).
BT-4	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Dead cottonwood (<i>Populus deltoides</i>) with cavities. Understory is second-growth mix of floodplain trees, some shrubs and upland emergents.
BT-5	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Understory consisted of floodplain species. Surrounding canopy consisted of cottonwood (<i>Populus deltoides</i>), box elder (<i>Acer negundo</i>) and red maple (<i>Acer rubrum</i>).
BT-6	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Understory consisted of floodplain species. Surrounding canopy consisted of cottonwood (<i>Populus deltoides</i>), box elder (<i>Acer negundo</i>) and red maple (<i>Acer rubrum</i>).
BT-7	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Red maple (<i>Acer rubrum</i>) with cavities. Understory consisted of floodplain species. Surrounding canopy consisted of cottonwood (<i>Populus deltoides</i>), box elder (<i>Acer negundo</i>) and red maple (<i>Acer rubrum</i>).
BT-8	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Red maple (<i>Acer rubrum</i>) with cavities. Understory consisted of floodplain species. Surrounding canopy consisted of cottonwood (<i>Populus deltoides</i>), box elder (<i>Acer negundo</i>) and red maple (<i>Acer rubrum</i>).
BT-9	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Red maple (<i>Acer rubrum</i>) with cavities. Understory consisted of floodplain species. Surrounding canopy consisted of cottonwood (<i>Populus deltoides</i>), box elder (<i>Acer negundo</i>) and red maple (<i>Acer rubrum</i>).
BT-10	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Dead cottonwood (<i>Populus deltoides</i>) with cavities. Understory is second-growth mix of floodplain trees, some shrubs and upland emergents.
BT-11	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Dead American basswood (<i>Tilia americana</i>) with cavities. Understory is second-growth mix of floodplain trees, some shrubs and upland emergents.
BT-12	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Understory consisted of rice cutgrass (<i>Leersia oryzoides</i>) and reed

Feature ID	Feature Type	Species of Concern	Mitigation	Description
				canary grass (<i>Phalaris arundinacea</i>). Surrounding canopy consisted of hackberry (<i>Celtis occidentalis</i>), green ash (<i>Fraxinus pennsylvanica</i>), cottonwood (<i>Populus deltoides</i>) and Ohio buckeye (<i>Aesculus glabra</i>).
BT-13	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Understory consisted of rice cutgrass (<i>Leersia oryzoides</i>) and reed canary grass (<i>Phalaris arundinacea</i>). Surrounding canopy consisted of hackberry (<i>Celtis occidentalis</i>), green ash (<i>Fraxinus pennsylvanica</i>), cottonwood (<i>Populus deltoides</i>) and Ohio buckeye (<i>Aesculus glabra</i>).
BT-14	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Dead green ash (<i>Fraxinus pennsylvanica</i>) with cavities. Understory consisted of rice cutgrass (<i>Leersia oryzoides</i>) and reed canary grass (<i>Phalaris arundinacea</i>). Surrounding canopy consisted of hackberry (<i>Celtis occidentalis</i>), green ash (<i>Fraxinus pennsylvanica</i>), cottonwood (<i>Populus deltoides</i>) and Ohio buckeye (<i>Aesculus glabra</i>).
BT-15	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Northern catalpa (<i>Catalpa speciosa</i>) with cavities. Sparsely vegetated understory. The surrounding canopy was dominated by northern catalpa (<i>Catalpa speciosa</i>).
BT-16	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Scrub/shrub dominated the understory. The surrounding canopy was dominated by cottonwood (<i>Populus deltoides</i>).
BT-17	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Cottonwood (<i>Populus deltoides</i>) with cavities. Scrub/shrub dominated the understory. The surrounding canopy was dominated by cottonwood (<i>Populus deltoides</i>).
BT-18	Potential Indiana Bat Tree	Indiana bat (<i>Myotis sodalis</i>) & Northern long-eared bat (<i>Myotis septentrionalis</i>)	Per USFWS guidelines, tree cutting must occur between October 1 and March 31. Additional measures will be taken if construction has not begun by March 31.	Shagbark hickory (<i>Carya ovata</i>) with peeling bark. The canopy surrounding the tree was open with some upland shrubs and emergents.
PH-1	Potential Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed

Feature ID	Feature Type	Species of Concern	Mitigation	Description
		<i>grammacus</i>)	According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	(<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>). Located in area of high disturbance and near industrial building.
PH-2	Potential Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>). Located in area of high disturbance and near industrial building.
PH-3	Potential Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>). Located in area of high disturbance and near industrial building.
PH-4	Potential Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>). Located in area of high disturbance and near industrial building.
PH-5	Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>).
PH-6	Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower

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				(<i>Echinacea Moench</i>).
PH-7	Prairie Habitat	Loggerhead shrike (<i>Lanius ludovicianus</i>) & Lark sparrow (<i>Chondestes grammacus</i>)	According to ODNR guidelines for the loggerhead shrike, construction may not occur in this habitat from April 1 to August 1. According to ODNR guidelines for the lark sparrow, construction may not occur in this habitat from May 1 to June 30. Additional measures will be taken if construction has not begun by April 1.	Dominant species in prairie habitat include: big bluestem (<i>Andropogon gerardii</i>), milkweed (<i>Asclepias incarnata</i>), Indian grass (<i>Sorghastrum nutans</i>), Hungarian brome grass (<i>Bromus inermis</i>), switchgrass (<i>Panicum virgatum</i>) and purple coneflower (<i>Echinacea Moench</i>).
WLD-M	Kirtland's Warbler Habitat	Kirtland's warbler (<i>Setophaga kirtlandii</i>)	According to USFWS guidelines for the Kirtland's warbler, construction may not occur in this habitat from April 22 to June 1 and from August 15 to October 15. If construction must occur during these dates, additional measures will be taken.	Scrub/shrub wetland dominated by sandbar willow (<i>Salix interior</i>) located approximately two miles from Lake Erie.
WLD-N	Kirtland's Warbler Habitat	Kirtland's warbler (<i>Setophaga kirtlandii</i>)	According to USFWS guidelines for the Kirtland's warbler, construction may not occur in this habitat from April 22 to June 1 and from August 15 to October 15. If construction must occur during these dates, additional measures will be taken.	Scrub/shrub wetland dominated by sandbar willow (<i>Salix interior</i>) located approximately two miles from Lake Erie.

The habitat identified included a limited amount of threatened and endangered habitat; no rare or unique habitat was identified. The Indiana bat and northern long-eared bat trees identified only included roosting/foraging trees and no maternity trees were identified. The dominate species found in the Prairie Habitat included big bluestem (*Andropogon gerardii*), milkweed (*Asclepias incarnata*), Indian grass (*Sorghastrum nutans*), Hungarian brome grass (*Bromus inermis*), switchgrass (*Panicum virgatum*) and purple coneflower (*Echinacea Moench*); these are all common species and not a unique or high quality habitat. The wetlands identified within the corridor do not contain the proper habitat for eastern massasauga (*Sistrurus catenatus*) or Blanding's turtle (*Emydoidea blandingii*).

4.0 SUMMARY

An ecological resources review was completed for a proposed 22-mile pipeline project from Maumee, Ohio to Oregon, Ohio on July 30-31, August 6-7, 14-15 and 19-20, 2014. The purpose of the ecological resources review was to identify surface waters and threatened and endangered species habitats. Fifteen wetlands (Wetlands A-O) and eighteen stream crossings (SC-1 through SC-18) were identified along the project corridor. Due to the location and hydrologic connection to a USGS blue line stream, it appears that Wetlands A, C and D will be considered jurisdictional (non-isolated) by the USACE, and therefore regulated under the Section 404 program. Wetland B and Wetlands E-O appear to have no direct connection to a jurisdictional stream, and will likely be considered isolated.

All wetlands were evaluated using the ORAM scoring system. Wetlands E-H and J-O were determined to be Category 1 wetlands. Wetland D was determined to be a Category 1 or 2 (Gray Zone) wetland, and will likely be regulated as a Category 2 wetland. Wetlands B, C and I were determined to be Modified Category 2 wetlands. Wetland A was determined to be a Category 3 wetland. A JD from USACE and an ORAM evaluation by the Ohio EPA will be necessary to confirm these findings.

The 22-mile corridor was reviewed for threatened and endangered species habitat. From the field resonance 18 Indiana Bat Trees were identified as potential roosting/foraging trees for Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*). To comply with recommendations provided by the resource agencies, these trees can only be cut down between October 1 and March 31. Seven areas were identified as potential prairie habitat for the Loggerhead shrike (*Lanius ludovicianus*) and Lark sparrow (*Chondestes grammacus*). Restrictions on impacting the prairie habitat include no construction in this habitat between April 1 to August 1 to avoid impact to the loggerhead shrike and no construction in this habitat from May 1 to June 30 to avoid impacts to the lark sparrow. In addition, two areas were identified as potential stopover habitat for the Kirtland's warbler (*Setophaga kirtlandii*). According to USFWS, construction may not occur in this habitat from April 22 to June 1 and from August 15 to October

15.

FIGURES



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Summary: Letter of Notification -- Exhibit G (Part 2 of 29) electronically filed by Mrs. Gretchen L. Petrucci on behalf of North Coast Gas Transmission LLC