Table 2-3   Stream Features Identified in New Project Area

| Stream ID | County | Crossing within New Project Area (linear feet) | Stream Classification | | | | | | | | | | | | | |
			HHEI Score	QHEI Score	PHWH Class	Drainage	Potential Mussel Habitat	Observed Mussel Population	WWH	EWH	MWH	AWS	IWS	BW	PCR	SCR
SOH-AD03	Hardin	545.90	57	31	Modified Class II	North Fork Great Miami River	Low	No	X		X	X			X	
SOH-AD04	Hardin	813.48	53	NA	Modified Class II	North Fork Great Miami River	Low	No	X		X	X			X	
SOH-AD05	Hardin	426.19	73	39	Class III PHWH	North Fork Great Miami River	Moderate	No	X		X	X			X	
SOH-AD06	Hardin	428.18	57	29	Modified Class II	North Fork Great Miami River	Low	No	X		X	X			X	
Total		**2,213.75**														

Notes:

QHEI - Qualitative Habitat Evaluation Index (0 to 100)

<32: limited resource water (LRW)

32 to 60: Modified warmwater habitat (MWH) (i.e., WWH has been disturbed but could potentially recover)

60 to 75: Warmwater habitat (WWH)

>75: Possible exceptional warmwater habitat (EWH)

Aquatic Use Designation:

WWH: Warm Water Habitat

EWH: Exceptional Warm Water Habitat

AWS: Agricultural Water Supply

HHEI - Headwater Habitat Evaluation Index (0 to 80)

Primary Headwater Habitat (PHWH) Classification:

<30: Class I PHWH (Typically Ephemeral Streams)

30 to 50: Class II PHWH (intermittent, warm water streams)

> 50: Class II or III PHWH (depending on conditions)

>75: Class III PHWH (perennial, cool water streams)

IWS: Industrial Water Supply

PCR: Primary Contact Recreation

SCR: Secondary Contact Recreation

NA - Not Applicable

2.2.5 Regulatory Overview

The Scioto Ridge Wind Farm Project was issued a CECPN on March 17, 2014 by the Ohio Power Siting Board.

2.2.6 Floral Communities

In general, the New Project Area shows the characteristics expected of a highly agricultural area. Cardno's previous observations of the Study Area were also applicable to the New Project Area. The Cardno team observed during the field surveys that the majority of the New Project Area consists of manipulated landscapes, with a high composition being farmed fields. The active crop areas often had associated agricultural ditches which were vegetated by Reed Canary grass, with deep cuts and at a steep grade to ensure capture of runoff from the fields in case of heavy rains.

The remaining New Project Area is a mixture of isolated and contiguous woodlots. The most commonly observed species were Oaks (Red or White) genus *Quercus*; followed by Green Ash *(Fraxinus pennsylvanica),* Red Maple (*Acer rubrum*), American Elm (*Ulmus americana*) and Shagbark Hickory *(Carya ovata)*. Many of these habitats also contained snags, and in conjunction with the dominance of Oaks (a slower growing, shade tolerant species) indicates more mature forests/woodlots.

Woodlots with hydric soils were more likely to develop wetlands due to positioning within the landscape (in depressions that received overland flow from adjacent land use). The creation of a depressional bowl allowed for the retaining of water in many of the hydric woodlots and development of wetlands. Only one of the woodlots reviewed in the July surveys contained a wetland. The wetland had an open canopy section dominated by various herbaceous species such as ragweed (*Ambrosia trifida)*, and a forested portion which contained Black walnut (*Juglans nigra*). The Vine stratum was often not present in the majority of the woodlots encountered during delineation.

Non hydric woodlots had many of the same tree species present, including Red Maple and American Elm. The herb stratum in the non-hydric woodlots was heavily represented by Dandelion (*Taraxacum officinale*), Kentucky Bluegrass (*Poa pratensis*), and Fescue grasses (*Fescue sp.*).

Potential tree clearing within the New Project Area was estimated using GIS software to delineate digital forest stand boundaries based on 2009 aerial imagery. A total of 5.09 acres of forest stand was delineated within the New Project Area; however, a total of only 0.032 acres of these forest stands are considered potential tree clearing for collection lines. Tree clearing assumes a 12.5 foot-buffer off the centerline for collection lines.

2.2.7 Faunal Communities

During Cardno's field surveys of the New Project Area and ¼ mile buffer, the team observed that faunal habitat conditions included snags where most of the nests observed were likely Passeriformes. The limited woodlots reviewed did not contain any significant debris piles which reduced the availability of prime habitat for reptilian and mammalian species. The only wetland identified in the New Project Area did not appear to pool water for a significant amount of time, which likely prevents amphibians from using the area during breeding season in the spring.

During the field surveys, the Cardno team recorded the presence or absence of freshwater mussels within the field-delineated streams. The survey team also designated the field-delineated streams for their potential for freshwater mussel habitat (i.e., Low, Moderate, High). No freshwater mussels were observed during Cardno's field survey. A summary of the Field-delineated streams is included in Table 2-3 above.

2.2.8 Rare, Threatened, and Endangered Species Impacts

Due to the high level of agricultural land use in the area, the majority of the available habitat is not suitable for Federal- or State-listed threatened or endangered plant or animal species that may potentially live in the area. The

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Summary: Application to Amend -- Exhibit D (Part 5 of 31) electronically filed by Mrs. Gretchen L. Petrucci on behalf of Hardin Wind LLC