

Potential Presence of Endangered Wildlife Species at the University of Delaware Wind Power Project Site

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To determine whether endangered terrestrial wildlife species are present or will likely use habitats at the University of Delaware wind power project site, we conducted an analysis of the suitability of habitat within the project footprint. The list of endangered species we used to make our assessments came from the Delaware Division of Fish and Wildlife website. Listed birds have been addressed in a separate report by Curry & Kerlinger, LLC.

The site assessment was conducted on December 4, 2009. At that time, the site was walked thoroughly and all habitat on site was inspected. The actual footprint of the project will amount to less than one hectare, although the site examined was about 4 hectares. This means that habitat immediately adjacent to the turbine site was also examined and evaluated. The site has been disturbed previously, and, in part, was originally a salt marsh. In other words, the site was filled years ago and the vegetation on site is now upland habitat. Habitat observed during the site visit included woody shrubs, bare earth, dredge spoil, and Phragmites. Adjacent to the site was salt marsh at about 60 m from where the turbine would be located. Within the tidal marsh there were also tidal creeks and guts.

The following list includes Delaware endangered species that are known to occur within Sussex County, Delaware, and may be found close to the project site. None are likely to be found on site, at least on a regular basis. There is simply little to no suitable habitat for these species within the project boundary. For each, we detail the likelihood of occurrence within the project boundary and provide reasons why, along with a brief assessment of potential risk to the species.

Corn Snake – Fairly common in Delaware, but is not likely to be present on site. Habitat for this species is generally pine-oak forest, although more southerly populations are more generalists than those at more northerly latitudes. Such pine-oak habitat is lacking on site and is not found close to the project. Thus, it is unlikely that corn snakes will be present on site, although dispersing individuals could, conceivably be on site. Such visitation, however, does not pose a threat to the species because human activity on site will be limited.

Tiger Salamander – This species depends on vernal (fresh water) ponds, which are not present on site. It is possible that a wandering individual could find its way to the project site a times. This would not pose a risk to the salamander because activity on site will be limited to occasional-rare visits by wind turbine maintenance crews.

Barking Treefrog – This species also depends on vernal (fresh water) ponds. Thus, it is not likely to be found on site, although wandering individuals could stray into the project area on rare occasions. As with tiger salamander, impacts to this species are unlikely because it will not be on site and if it does wander on site, there will be little activity on site to threaten the species.

Delmarva Fox Squirrel – Fox squirrels inhabit pine and pine-oak forests, which do not occur on site and are not found close to the project site. It is highly improbable that this species will wander into the project site and if it does, it will not remain on site. There is no risk to this species from the project.

Frosted Elfin – As with most lepidoptera, frosted elfin and rare skipper are subject to dispersal by the wind. This means that this and the next species can be found in many unsuitable habitats because they are blown there by the wind. Habitat at the project site does not seem suitable. The host species for frosted elfin is wild indigo, which is not likely to be found on site. Thus, this species will not likely be found on site and is not at risk from the project.

Rare Skipper – Habitat of rare skippers is *Spartina* spp. Although spartina is located adjacent to the project site, none will be disturbed by the project. Rare skipper could be present on site at times, but it is highly improbable that these individuals will remain on site or be impacted by the project.

Large Tiger Beetle – This species of tiger beetle is found almost exclusively on sandy beaches, which are not present on site. Thus, there is little likelihood of finding this species at the project and no impacts are anticipated.

Little White Tiger Beetle – Critical habitat for this species includes “gravel” pits and other areas with white sand. The project site does not have such habitat and it is too disturbed to support

little white tiger beetles. Therefore, it is improbable that the project will impact this species or pose a risk to the species.

Overall, we anticipate no risk to the above endangered species. It is unlikely that any individuals will be present on site because habitat on site is not suitable for any terrestrial endangered species in Delaware. No critical habitat for endangered species will be impacted by project activities. It is conceivable that an occasional individual of the species listed above may be transient at rare times on the project site. At such times, they are unlikely to be at risk because on site activities will be minimal and not of the type likely to harm or kill these species.