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Natural Resources Consulting, Inc.

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December 18, 2008

Joe Kath
Terrestrial Endangered Species Project Manager
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1271

Re: Conservation Plan
Wolf Creek Windpower Project
Acciona Wind Energy USA, LLC
Stephenson and Jo DaviessCounties, Illinois
NRC Project No. 008-0231-01

Dear Mr. Kath:

Enclosed please find a copy of the Conservation Plan for the EcoGrove and Wolf Creek windpower projects located in Stephenson and Jo Daviess counties, Illinois. Submission of this Plan is intended to serve as an application for an Incidental Take Authorization (ITA) for the Wolf Creek windpower project. One species is covered by the Plan and includes the upland sandpiper. An ITA application will be submitted for the EcoGrove windpower project under separate cover and will include the enclosed combined conservation plan.

No impact to known habitat for this species is expected to occur as a result of the project. Although we feel that the actual risk of a take is very low, it is possible that a take could occur during the construction process or as a result of routine operation of the wind farm facilities despite best efforts to avoid or minimize take as outlined in the conservation plan.

Once you have completed your review of the plan and feel that is it complete, Acciona Wind Energy LLC, or an affiliate, will publish the required notice in a local and State newspaper. A copy of the notice will be submitted to you for approval prior to publishing.

Please feel free contact me if you need additional information or if you have any questions.

Sincerely,

Natural Resources Consulting, Inc.

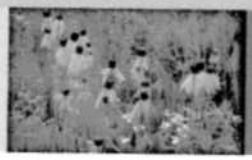
William Poole

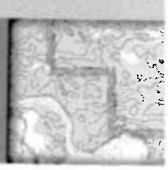
William Poole
Senior Principal Scientist

Enclosure

C: Richard Murphy, Acciona Wind Energy USA, LLC w/ enclosure

Natural Resources Consulting, Inc.





CONSERVATION PLAN:

EcoGrove/Wolf Creek Wind Energy Projects
Stephenson and Jo Daviess Counties, Illinois

NRC Project No. 008-0231-01
November 24, 2008

PREPARED FOR:

EcoGrove Wind LLC
Acciona Wind Energy USA, LLC
333 W. Wacker Drive
Suite 1500
Chicago, IL 60606

PREPARED BY:

Natural Resources Consulting, Inc.
PO Box 128
209 Commerce Parkway
Cottage Grove, WI 53527

NRC
Natural Resources Consulting, Inc.

Regulatory and Scientific Expertise – Wetlands, Soils, Ecology, Restoration

CONSERVATION PLAN

ECOGROVE WIND LLC
ACCIONA WIND ENERGY USA LLC
ECOGROVE/WOLF CREEK WINDPOWER PROJECTS
STEPHENSON AND JO DAVIESS COUNTIES, ILLINOIS

November 24, 2007

Prepared For:

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NRC Project # 008-231-01

William Poole
Senior Principal Scientist

William Mueller
Environmental Scientist/Avian Ecologist

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Figure 3. Wolf Creek Wind Farm Upland Sandpiper Location

(These figures represent two separate Incidental Take Authorization requests – See introduction below)

PROJECT LOCATIONS

See Figure 1 – Graphic project overview.

EcoGrove (Phase 1)

Stephenson County, Illinois
Township 29N; Range 6E, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33
Township 29N; Range 5E, Sections 22, 23, 24, 25, 26, 27, 34, 35, 36
Township 28N; Range 6E, Sections 4, 5, 6, 7, 8, 9, 18, 19
Township 28N; Range 5E, Sections 1, 2, 3, 10, 11, 12, 13, 14, 15, 24

USGS Quadrangles: Warren, Lena, South Wayne and Browntown

Wolf Creek (Phase 2)

Stehpenson County, Illinois
Township 29N; Range 5E, Section 34
Township 28N; Range 5E, Sections 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 – 36
Township 28N; Range 6E, Sections 30, 31

Jo Daviess County, Illinois
Township 29N; Range 5E, Sections 19, 20, 21, 28, 29, 30, 31, 32, 33
Township 28N; Range 6E, Sections 4-9, 16-21, 28-33

USGS Quadrangles: Warren and Kent

PRIMARY CONTACT

William Poole
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INTRODUCTION

Acciona Wind Energy USA LLC (Acciona) and EcoGrove Wind LLC are proposing two phases of a windpower project in Stephenson and Jo Daviess Counties in Illinois. The first project phase, which is the EcoGrove windpower project, will be constructed by EcoGrove LLC in Stephenson County. The second phase, which is the Wolf Creek windpower project, will be constructed in Stephenson and Jo Daviess Counties by Acciona Wind Energy USA LLC or an affiliate. Either or both projects may be assigned to another project entity or entities. The purpose of this Conservation Plan is to review the proposed EcoGrove/Wolf Creek Windpower project in sufficient detail to determine to what extent the proposed action may result in an "incidental take" of the Illinois state-listed endangered species listed below. This conservation plan is intended to support two separate stand-alone Incidental Take Authorization (ITA) applications for the EcoGrove and Wolf Creek windpower projects.
-Figure 1 depicts the two project and ITA request boundaries.
-Figure 2 references the EcoGrove project and ITA request area.
- Figure 3 references the Wolf Creek project and ITA request area.

Target Species

- **Upland Sandpiper** (*Bartramia longicauda*) – Endangered (IL Joint Committee on Legislative Rules 2004).

Consultation to Date

July 21, 2008: On behalf of EcoEnergy, LLC, a Natural Resources Consulting, Inc. (NRC) representative spoke with Illinois Department of Natural Resources (IDNR) staff (Keith Shank) to inform him that pre-construction breeding bird surveys documented the occurrence of 3 upland sandpipers within the EcoGrove/Wolf Creek Windpower project areas and discussed the need for an Incidental Take Authorization (ITA). Mr. Shank recommended that the ITA process should be implemented for this particular species at these project locations.

November 6, 2008: A NRC representative spoke with IDNR staff (Keith Shank) to inform him of the observation of one bald eagle (*Haliaeetus leucocophalus*) and one northern harrier (*Circus cyaneus*) within the EcoGrove/Wolf Creek windpower project areas during the spring migratory period and to discuss the need for including these species in the ITA request. Mr. Shank indicated that these transient observations do not provided sufficient data to demonstrate a high probability of "take" and therefore, are not required to be included in the ITA request. If "take" occurs to either of these species on more than one occasion after the project is operational, the need for an ITA may be reconsidered by the IDNR and they are willing to work with the project operator to investigate measures to avoid future "take".

DESCRIPTION OF THE PROPOSED ACTION

Project Description

The EcoGrove and Wolf Creek windpower projects are state-of-the art wind energy projects located in Stephenson and Jo Daviess Counties, Illinois. The EcoGrove phase has a nameplate capacity of 100.5 megawatts (MW) and consists of sixty-seven 1.5 MW wind turbine generators (WTGs). The WTGs are situated on approximately 21,000 acres in Winslow and West Point Townships, Stephenson County, but the entire improved foot print of this phase will only occupy a total of approximately 100 acres or less.

The Wolf Creek phase is still in the planning process and therefore, the turbine nameplate capacity and number of WTGs has yet to be determined but is expected to be in the range of 125 MW - 200 MW. The proposed Wolf Creek phase project area is situated on approximately 25,300 acres in West Point Township, Stephenson County and Nora and Warren Townships, Jo Daviess County. For the Wolf Creek phase, the ratio of improved footprint to the overall project area will likely be similar to that of the EcoGrove phase.

Each WTG is manufactured off site and consists of a 263-foot tower, a nacelle that houses the generator and gearbox, and a three-blade rotor assembly, all of which is shipped to the project location and assembled on-site. From the base of the tower to the tip of the blade, the total height of the WTG is 397 feet. Each WTG will be anchored to a steel reinforced concrete foundation. A pad-mount transformer will be installed at the base of each WTG and will collect electricity generated by each turbine through cables routed down the inside of the tower. The purpose of the pad-mount transformer is to step the voltage up from 12,000 volts to 34.5 kilovolts (kV) to efficiently transmit power to the collector substation located in West Point Township. EcoEnergy will install a 34.5kV underground power collection system between the pad-mount transformers and a collector substation. This power collection system will consist of a series of underground cables ranging from 2 to 5 inches in outside diameter. The project substation will be constructed in order to deliver power from the power collection system to the Commonwealth Edison (ComEd) transmission system. The project substation will receive the power from the power collection system at a voltage of 34.5kV and will step it up to 138kV. The power will then be routed through approximately 8 miles of overhead transmission line where it will then be interconnected into a ComEd 345kV transmission line.

In addition to the WTGs and power collection system, the EcoGrove/Wolf Creek project will construct approximately 22 miles of service roads allowing access to the WTGs during and after construction. The service roads will be approximately 16 feet wide and will be constructed of crushed gravel/rock. Two permanent, 80 meter meteorological towers have been installed at the project site. These towers will be used for performance testing of the wind WTGs to ensure that they meet the manufacturers' specifications. Temporary, 60 meter guy-wired meteorological towers have also been installed to collect preliminary wind data for the project area and to calibrate the permanent towers. These will eventually be decommissioned and removed.

In addition, the applicable developer will construct an operation and maintenance building adjacent to the substation location. The operations and maintenance building will house a supervisory control and data acquisition ("SCADA") system that records wind speed, direction, power production and other pertinent information.

Construction of the EcoGrove phase began in August 2008 and is expected to be completed in 2009. The Wolf Creek phase is anticipated to begin in 2009-2010.

Action Area

The action areas for this Conservation Plan are defined as the mapped upland sandpiper habitat boundary near Turbine A02.01 within the EcoGrove phase in Stephenson County, IL and the mapped habitat boundary located approximately 0.25 – 0.5 miles south of intersection of Mammoser and Chelsea Roads (Wolf Creek Phase) in Jo Daviess County, IL (Figures 2 and 3). This includes the construction, operation and maintenance of any WTGs and/or their associated access roads and collector lines located within the EcoGrove phase action area. The number and location of WTGs within the Wolf Creek project area has yet to be determined. These are the areas in which construction and operation of the EcoGrove/Wolf Creek windpower projects pose the greatest risk of "incidental take" of the species included in this Conservation Plan.

SPECIES ACCOUNTS

Upland Sandpiper

Species Description

The upland sandpiper (*Bartramia longicauda*) is a medium-sized shorebird, preferring grassland habitats during the breeding season as well as during migration and on the wintering grounds. This preference for grassland habitats during all parts of the annual cycle contrasts with the use of ocean, lake, pond, and river shorelines typically occupied by many other shorebird species during the non-breeding parts of the year. The upland sandpiper is most abundant in areas of mixed-grass prairie, utilizing hayfields and other dry grasslands, characterized by a low to moderate cover of forbs, a low density of woody cover, relatively moderate amounts of dead vegetation and litter, and limited areas of bare ground (Johnsgard 1981, Sample and Mossman 1997). Other commonly used habitats in the upper Midwest include moderately-grazed pastures, old-fields, unused agricultural fields, railroad rights-of-way, grassy areas of airports, barrens areas, as well as extensive dry forest clearcuts. Resting and brood-rearing areas include hayfields, more heavily-grazed pastures, fallow fields, and occasionally row crop acreage, harvested alfalfa, or other crop fields (Herrman 2007, Sample and Mossman 1997, USFWS 2001). Vegetation in the preferred habitat is usually 4-16 inches (10-40 cm) tall. This species generally avoids taller and more-dense vegetation (Houston 2001). Since the late 1980s, the species has often used idle agricultural lands that include acreage enrolled in the Conservation Reserve Program [CRP] (Herrman 2007, Igl and Johnson 1997). Upland sandpipers prefer to forage in areas of shorter vegetation, but adults occasionally nest and rear broods within fields and prairies characterized by slightly taller vegetation. The time of day, birds' daily activities, and the temporal phase of the nesting cycle are also determinants of habitat use (Dechant et al. 2003).

Upland sandpipers are ordinarily highly area-sensitive, most often requiring grassland patch sizes greater than 75 acres (30 ha) in size (DeChant et al. 2003, Herrman 2007) as breeding habitat. Nesting densities of upland sandpipers are often positively correlated with habitat (patch) area, but inversely correlated with perimeter: area ratios of the areas under consideration (DeChant et al. 2003).

Nesting at the latitude of the EcoGrove project area usually commences in early-to-mid-April. Most individuals of this species are paired by the time they reach this latitude (Johnsgard 1981).

Habitat Requirements

Large areas of idle grasslands, old fields, and lightly-grazed pastures extensive enough to attract the upland sandpiper are extremely uncommon today in Illinois, and are increasingly subject to the process of fragmentation, especially on private agricultural lands that the upland sandpiper is likely to use (Sample and Mossman 1997). The conversion of pasture and fallow fields to row crops and the growth of trees within existing fence lines have diminished the amount of available habitat on private lands. Considering the upland sandpiper's preference for large habitat areas (generally greater than 100 acres in area), the habitat descriptors of few to no shrubs, and shorter vegetation height (generally less than 3 ft [1 meter]), few public or private lands managed as medium to large scale upland grasslands currently exist in northwestern Illinois.

Species Status in the Action Area

The upland sandpiper has declined in Illinois due to the loss of pasture or grassland acreage and exacerbated by increasingly intensive agricultural practices. Only a remnant of the former population of this species still nests in Illinois, and the species is listed as endangered in the state by the Illinois Department of Natural Resources (Illinois Endangered Species Protection Board 2007, Illinois Wildlife

Action Plan 2008). Recent observation of breeding pairs in and near the project area are limited to two occurrences in 2008 (on each in Jo Daviess and Stephenson counties); one occurrence in 2005 in Jo Daviess County; no other observations in Stephenson County in recent years; one in adjacent Ogle County in 2006; two in adjacent Winnebago County in 1988; and none in adjacent Carroll County during recent years (IDNR 2006 and 2008, Illinois State Museum n.d.).

HABITAT ASSSESSMENT

Prior to the field investigation, several data sources were consulted to identify areas of potential habitat for the target species included in this Conservation Plan. These included:

- USGS 1:24,000 Scale Topographic Maps
- Recent Aerial Photography
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Maps
- Natural Resources Conservation Service Soils Data for Stephenson and Jo Daviess Counties

A regularly scheduled breeding bird survey conducted by NRC avian ecologist Wendy Van DeWalle detected two individual upland sandpipers along Mammoser Road in Jo Daviess County on June 30, 2008, and another single individual along Waddams Grove Road in Stephenson County on the same date. A follow-up field survey to confirm these detections, utilizing digital playback of upland sandpiper vocalizations, was done by NRC avian ecologist Bill Mueller on July 10, 2008. All three individual upland sandpipers were relocated on July 10. A windshield and walking survey of the locations at which each bird was located was conducted on this date to field locate and map any potential upland sandpiper habitat that may occur in these areas. No intensive searches for upland sandpiper nests or young were conducted as part of this habitat assessment.

Habitat used by the upland sandpipers detected at these locations is of very low quality. It consists of weedy soybean fields, with grassed waterways approximately 19-32 feet (6-10 meters) in width, occupying strips between the soybean fields and adjacent crop fields. This type of habitat is widely recognized as suboptimal for this species, but upland sandpipers are occasionally detected in, and individual birds are occasionally seen foraging in agricultural crop fields (D. Sample, WDNR Research Scientist, personal communication; Best et al. 1997; Dechant et al. 2003; Houston et al. 2001, and USFWS 2001).

General Habitat Conditions

The project area consists of flat to rolling topography in a highly agricultural setting. Land use on well over 90 percent of the land within the overall EcoGrove/Wolf Creek wind project area is farmstead or row crop production, with slightly less than 90 per cent devoted exclusively to soybean and corn production. A limited number of scattered and fragmented woodlands, wetlands and pasture/old field habitats are found within the project limits.

Upland Sandpiper Habitat Conditions

Two areas of potential low-quality habitat for the upland sandpiper were found within the action area and are shown in Figures 2 & 3. The site located along Mammoser Road consists of agricultural fields planted in soybeans and corn, with grassed waterways lying between each set of fields, and relatively narrow sections of weedy old-fields adjacent to an unnamed tributary of the South Fork of the Apple River. This area consists of very suboptimal habitat for the upland sandpiper. The site along Waddams Grove Road is similar in terms of row crop use, but also has adjacent small areas of box elders lining the

banks of the East Spafford Branch (a local creek). These habitat descriptors do not generally characterize good quality breeding habitat for the upland sandpiper.

EFFECTS OF THE PROPOSED ACTION

Direct Effects on Habitat

Upland Sandpiper

The placement of proposed WTGs A02.01, A02.02, A02.04, and A05.10 within the EcoGrove phase of the project and their associated connector cables and access roads (Figure 2) will impact a total of approximately 0.2 acres of potential low quality/marginal upland sandpiper habitat, of which all will be temporary impacts. Therefore, the project will result in no permanent loss of low/marginal quality upland sandpiper habitat located approximately 0.25 – 0.5 mile south of the intersection of Blair and Waddams Grove Roads in Stephenson County.

Within the overall Wolf Creek phase area the second upland sandpiper possible nesting area is located approximately 0.25 – 0.5 miles south of the intersection of Mammoser and Chelsea Roads in Jo Daviess County. However, due to the proximity of two farmsteads, and associated setback requirements, near the mapped habitat patch, at this time no WTGs or associated connectors and access roads are scheduled to be constructed in close proximity to this area and therefore, "incidental take" of upland sandpipers is not likely.

Incidental Take

Although the actual risk of a take is very low as a result of the proposed project, the potential for an "incidental take" of the upland sandpiper does nevertheless exist. The exclusion or displacement of a nesting pair from the area occupied during the 2009 breeding season is the potential scenario during construction and following placement of WTGs. This will likely result in a temporary loss of nesting habitat rather than the direct mortality of individual birds. Incidental take may occur through vehicular traffic on Mammoser Road in Jo Daviess County, and on Waddams Grove Road in Stephenson County, and on or near the proposed gravel access roads and WTG pads for WTGs A02.01, A02.02, A02.04, and A05.10. While the risk of an "incidental take" of this species by vehicular traffic does exist, we feel that the risk resulting from the proposed project is not significantly increased over the current conditions. No direct construction related mortality or mortality through general degradation of the surrounding habitat is expected to occur within the breeding and/or non-breeding portions of the respective species life cycles.

Measures to Minimize Effects of the Proposed Action

In order to minimize potential impacts to upland sandpipers and their associated habitat for the EcoGrove phase of the project, construction activities including tower construction, access road construction and installation of underground collector cables will be conducted during the non-breeding/nesting season (i.e. August 1, 2008 - April 15, 2009).

Measures will be taken during the design of the Wolf Creek phase to minimize potential impacts to the species covered by this Conservation Plan and the upland sandpiper habitat within this area. Such minimization measures will include one or more of the following as appropriate:

- Time of year construction restrictions between April 15 and August 1 within the delineated habitat patch (Figure 3) or, conduct a survey within the habitat patch just prior to construction activities to determine presence/absence,

- Avoid construction activities within suitable habitat to the greatest extent practicable,
- Inform construction personnel of the possible presence of the upland sandpiper in the project area and asking them to watch for any sandpipers within the construction zone or on adjacent roads.
- If upland sandpipers are found in the construction area between April 15 and August 1, consultation with IL Department of Natural Resources personnel should be initiated immediately.
- As part of Acciona's overall safety program, self-imposed speed limits of 35 mph on public roads and 15 mph on service roads have been implemented within the project boundary. These reduced speed limits will help to avoid vehicle collisions with any individual birds.

Measures to Mitigate Effects of the Proposed Action

1. Temporary impact areas, if any, on nonagricultural land associated with WTGs A02.01, A02.02, A02.04, and A05.10 will be reseeded with a mix of native grasses and forbs.

2. In the event of a documented "incidental take" of upland sandpiper as a direct result of the construction or operation of the EcoGrove/Wolf Creek windpower project, The project owner(s) propose to mitigate for the taking by hiring a qualified biologist with experience with the affected species to conduct a preliminary population survey of the affected species in the area of the taking. The purpose of the survey would be to gain a better understanding of the size, location and movement of the population of the affected species in an effort to avoid any future takings. The final results of the survey would be provided to the IDNR.

Monitoring

The only monitoring proposed is routine observation of species and reporting of road kills by Acciona or construction staff in conjunction with their normal duties. The IDNR shall be notified of any upland sandpiper observations or road kills in the project area.

CONCLUSIONS AND EFFECTS DETERMINATION

Upland Sandpiper

We conclude that the proposed EcoGrove/Wolf Creek windpower projects are **Not Likely to Adversely Affect the Upland Sandpiper** for the following reasons:

- Only a small area (~ 0.2 acres) of low/marginal-quality upland sandpiper habitat will be temporarily impacted within the EcoGrove/Wolf Creek project area.

- The closest proposed WTG locations to known upland sandpiper habitat within the EcoGrove phase of the project area is approximately 300 feet and is found near WTGs A02.01, A02.02, A02.04, and A05.10, all located outside of the Waddams Grove Road area used by upland sandpipers during 2008.

- Because most construction-related activities for the EcoGrove phase will be completed prior to the bird breeding season no significant loss of eggs, or egg laying habitat is expected to occur.

- Upland sandpipers typically fly at a height, including aerial courtship displays, lower than the expected lowest point of a WTG blade; therefore, the potential for mortality during operation of the WTGs is expected to be low.

- A low risk of "incidental take" as a result vehicular mortality does exist. However, in the event

that an upland sandpiper should fly out of the known habitat, the likelihood of it encountering either construction or maintenance vehicles is, in our opinion, exceedingly remote. Further, it is anticipated that construction vehicles on access roads will not be traveling at a velocity sufficient to result in an accidental taking, since this species has the ability to evade slow-moving vehicles in such encounters.

- The overall quantity or quality of habitat should not be diminished on a scale that results in jeopardy to the species because of the lack of essential habitat located within the EcoGrove/Wolf Creek project areas.

IMPLEMENTING AGREEMENT

The applicable project owner will be responsible for overseeing all monitoring and mitigation efforts identified within the Conservation Plan for its project while under its ownership. The applicable project owner will be responsible for planning, contract execution and construction supervision for its entire project while under its ownership.

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FIGURES

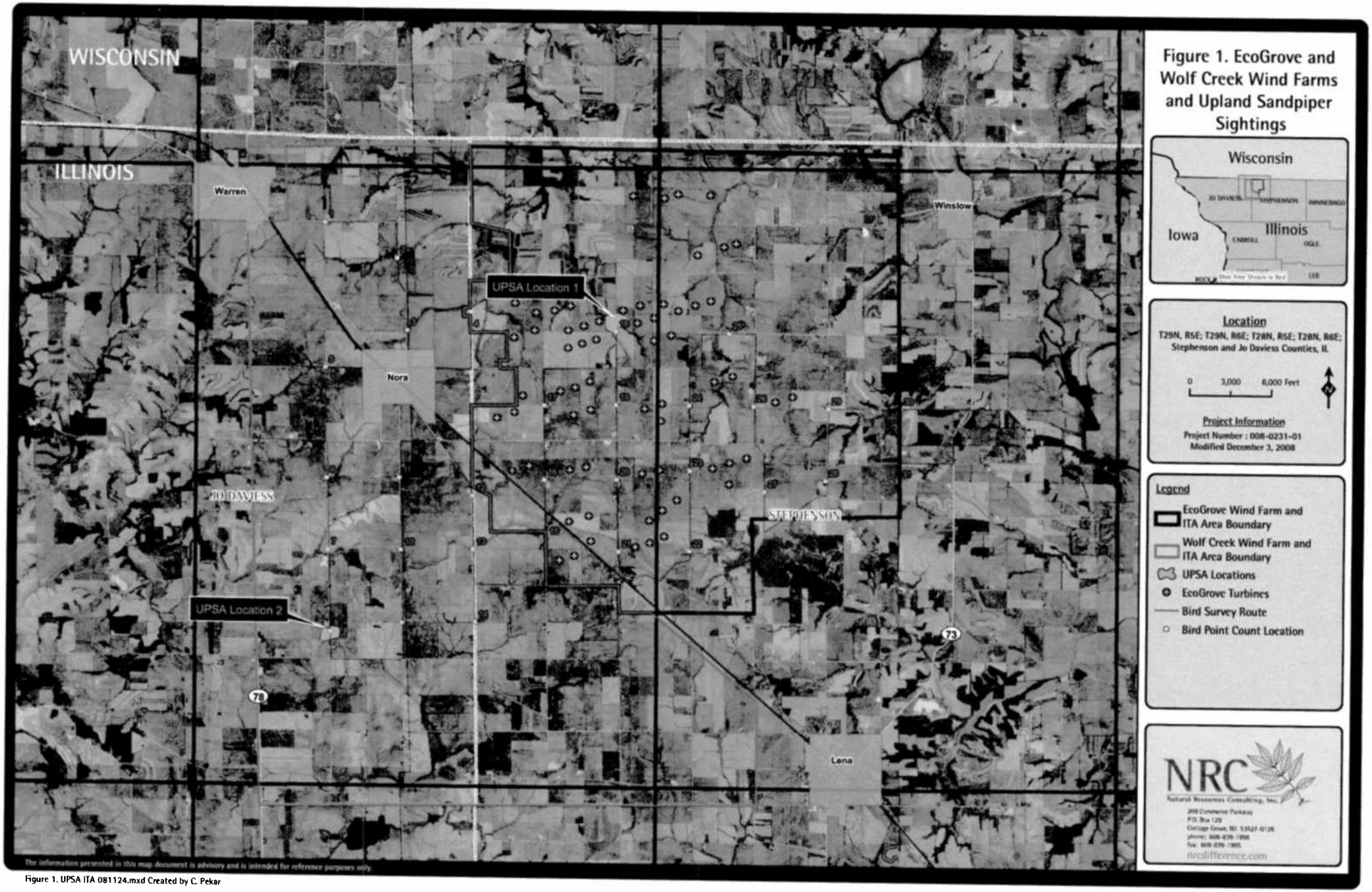

Figure 1. UPSA ITA 081124.mxd Created by C. Pekar

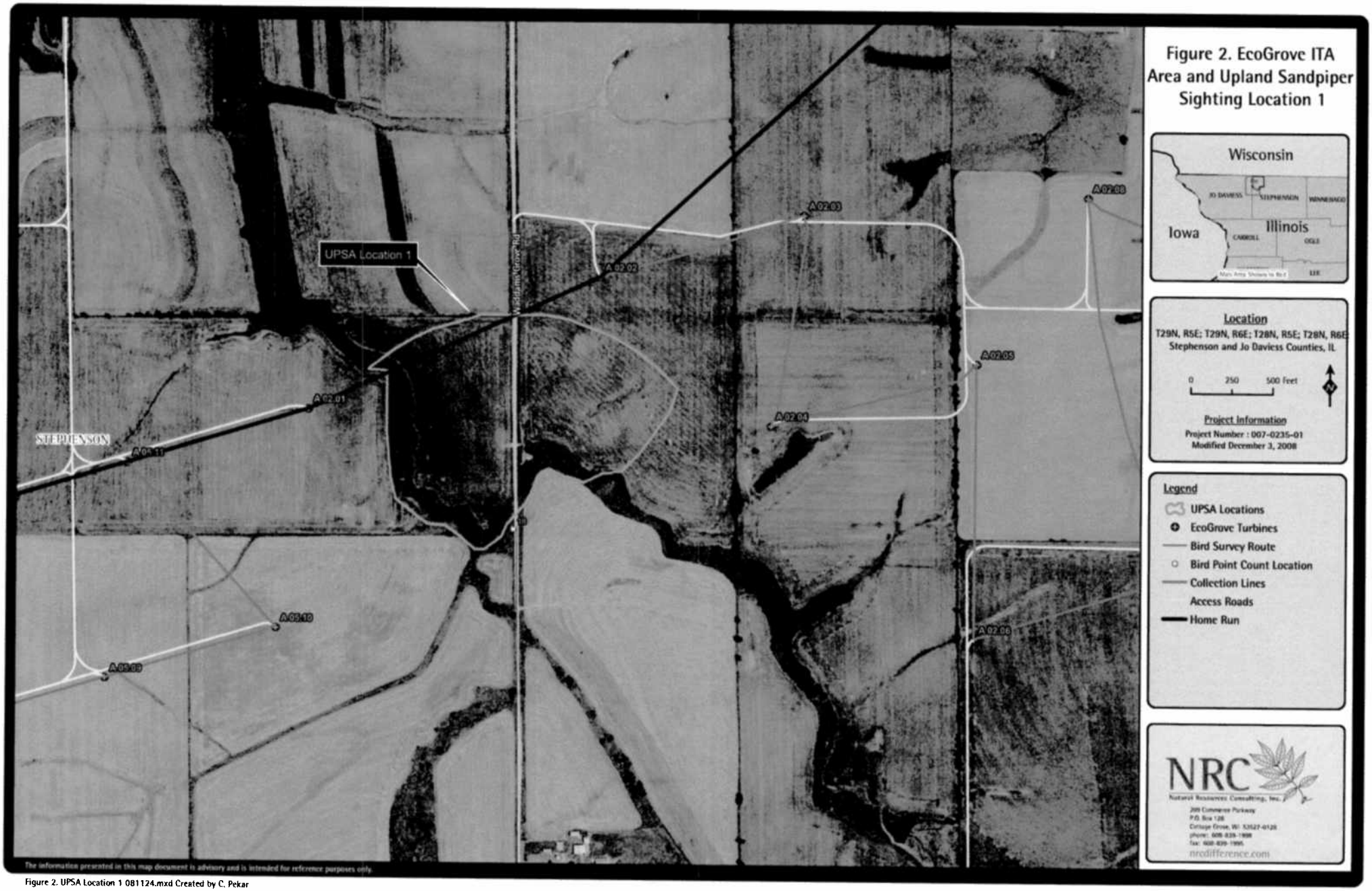

Figure 2. UPSA Location 1 081124.mxd Created by C. Pekar

Figure 3. UPSA Location 2 081124.mxd Created by C. Pekar