

## **Authorization for Incidental Take and Implementing Agreement**

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5), on behalf of EcoGrove Wind LLC, authorization for the incidental take of the State listed Upland Sandpiper in Stephenson County, Illinois [associated with the EcoGrove Wind Energy Project - NRC Project No. 008-0231-01; as described/shown in the conservation plan received by the Department on 14 January 2009 ] is hereby granted, subject to the terms and conditions described in the attached Authorization and Implementing Agreement. The Illinois Department of Natural Resources has determined that this authorized take is incidental to the construction of the EcoGrove Wind Energy Project, in Stephenson County, Illinois.

### Procedural History

Natural Resources Consulting, Inc. (NRC), on behalf of EcoGrove Wind LLC, prepared a conservation plan for the EcoGrove Wind Energy Project - NRC Project No. 008-0231-01 as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That final plan and NRC's request (on behalf of EcoGrove Wind LLC) for authorization for incidental take of the Upland Sandpiper in Stephenson County, Illinois were received by the Illinois Department of Natural Resources (Department) on 14 January 2009. Public notice of NRC's request for authorization of incidental take of this State listed species was published in the Northwest Daily Herald (Official State newspaper) and The Journal Standard (northwestern Illinois) on February 5, 2009, as well as on February 12, 2009 and February 19, 2009. Public comments on NRC's conservation plan were accepted by the Department until March 20, 2009. No comments were received by the public during the period of February 5, 2009 through March 20, 2009.

The EcoGrove windpower projects is a state-of-the art wind energy project located in Stephenson County, 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.

### \*Target Species

**Upland sandpiper** (*Bartramia longicauda*) – (Illinois) State Endangered

### Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six (6) criteria which must be met for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each criteria are listed below.

1. The taking will not be the purpose of, but will only be incidental to, the carrying out of an otherwise lawful activity:

The EcoGrove windpower projects is a state-of-the art wind energy projects located in Stephenson County, 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.

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 WAGS and power collection system, the EcoGrove project will construct approximately 22 miles of service roads allowing access to the WAGS 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 WAGS 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 ("SAADA") system that records wind speed, direction, power production and other pertinent information.

#### 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. This includes the construction, operation and maintenance of any WAGS and/or their associated access roads and collector lines located within the EcoGrove phase action area. These are the areas in which construction and operation of the EcoGrove windpower project pose the greatest risk of "incidental take" of the species included in this Conservation Plan.

2. The parties to the conservation plan will, to the maximum extent practicable, minimize and mitigate the impact caused by the taking.

### **I. Habitat Requirements/Species Status:**

**Upland Sandpiper:** 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.

Upland sandpipers are ordinarily highly area-sensitive, most often requiring grassland patch sizes greater than 75 acres (30 ha) in size 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. 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.

#### 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. 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. Recent observation of breeding pairs in and near the project area are limited to two (2) occurrences in 2008 (one [1] each in Jo Daviess and Stephenson counties); one (1) occurrence in 2005 in Jo Daviess County; no other observations in Stephenson County in recent years; one (1) in adjacent Ogle County in 2006; two (2) in adjacent Winnebago County in 1988; and none in adjacent Carroll County during recent years.

### **II. On-site Habitat Evaluation:**

**Upland Sandpiper:** A regularly scheduled breeding bird survey conducted by NRC avian ecologist Wendy Van DeWalle on June 30, 2008 detected a single upland sandpiper along Waddams Grove Road in Stephenson County. A follow-up field survey to confirm this detection, utilizing digital playback of upland sandpiper vocalizations, was done by NRC avian ecologist Bill Mueller on July 10, 2008. The individual upland sandpiper was relocated on July 10. A windshield and walking survey of the location at which the bird was located was conducted on this date to field locate and map any potential upland sandpiper habitat that may occur in this area. No intensive searches for upland sandpiper nests or young were conducted as part of this habitat assessment.

Habitat used by the upland sandpiper detected at this location 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.

3. The parties to the conservation plan will ensure that adequate funding for the conservation plan will be provided:

In an official correspondence to the Department dated 14 January 2009, EcoGrove Wind LLC verified that adequate funding exists to support and implement all (mitigation) activities described in the official Conservation Plan. This correspondence states that during site development, and continuing through routine monitoring, EcoGrove Wind LLC will **provide all of the necessary funding** for the implementation of the taking minimization measures.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of the survival or recovery of the endangered species or threatened species in the wild in Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois:

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:

1 USGS 1:24,000 Scale Topographic Maps

2 Recent Aerial Photography

3 U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NAI) Maps

4 Natural Resources Conservation Service Soils Data for Stephenson and Jo Daviess Counties

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 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.

Two (2) areas of potential low-quality habitat for the upland sandpiper were found within the action area. 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.

## Upland Sandpiper

The EcoGrove Windpower Project is 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 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 WAGS 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 WAGS is expected to be low.

\*A low risk of “incidental take” as a result of 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 more than likely 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 project area.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], will be performed:

Additional measures are listed below under “Authorization.” This authorization is, by definition, subject to those terms and conditions and official EcoGrove Wind LLC signature(s) on this authorization indicates their commitment to performing those measures.

Although the actual risk of a take is more than likely 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 WAGS. 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 or near the proposed gravel access roads and WTG pads for WAGS A02.01, A02.02, A02.04, and A05.10. While the risk of an “incidental take” of this species by vehicular traffic does exist, more than likely 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.

## PROBABLE EFFECTS OF THE PROPOSED ACTION

### Upland Sandpiper

The placement of proposed WAGS A02.01, A02.02, A02.04, and A05.10 within the EcoGrove phase of the project and their associated connector cables and access roads 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 more than likely 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.

6. The public has received notice of the application and has had the opportunity to comment before the Department made any decision regarding the application:

Natural Resources Consulting, Inc. (NRC), on behalf of EcoGrove Wind LLC, prepared a conservation plan for the EcoGrove Wind Energy Project - NRC Project No. 008-0231-01 as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That final plan and NRC's request (on behalf of EcoGrove Wind LLC) for authorization for incidental take of the Upland Sandpiper in Stephenson and County, Illinois were received by the Illinois Department of Natural Resources (Department) on 14 January 2009. Public notice of NRC's request for authorization of incidental take of this State listed species was published in the Northwest Daily Herald (Official State newspaper) and The Journal Standard on February 5, 2009, as well as on February 12, 2009 and February 19, 2009. Public comments on NRC's conservation plan were accepted by the Department until March 20, 2009. No comments were received by the public during the period of February 5, 2009 through March 20, 2009.

### Authorization

It is the determination of the Department that the measures to be implemented by EcoGrove Wind LLC will adequately minimize and mitigate for the anticipated taking (disturbance/harassment) of a small number of upland sandpipers due to the construction of the EcoGrove Wind Energy Project, in Stephenson County, Illinois. Further, it is our opinion that the take (disturbance/harassment) authorized herein would not diminish the likelihood of the survival of either these aforementioned species in the wild within the State of Illinois, the biotic community of which the species is a part, or the habitat essential to the species' existence in Illinois.

Pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.40(b)], this authorization is issued subject to the following additional terms and conditions:

1. This authorization is effective upon signature of the Department and shall remain **in effect for a period of ten (10) years**, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - 17 IL. Adm. Code Part 1080.80].
2. The following measures shall be implemented with regards to the EcoGrove Wind Energy Project
  - a. For the EcoGrove Phase: In order to minimize potential impacts to upland sandpipers and their associated habitat for this phase of the project, construction activities including tower construction, access road construction and installation of underground collector cables shall only be conducted during the non-breeding/nesting season (i.e. August 1 to April 15).

3. In the event of a documented “incidental take” of any of the species (upland sandpiper) covered by this Conservation Plan, as a direct result of the construction or operation of the EcoGrove Wind Energy Project, EcoGrove Wind LLC shall help 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 shall be provided to the IDNR (Attn: Joseph Kath) within 60 days of completion.

4. Temporary impact areas, if any, on nonagricultural land associated with WAGS A02.01, A02.02, A02.04, and A05.10 shall be reseeded with a mix of native grasses and forbs. EcoGrove Wind LLC shall monitor these areas and if reseeded is not a success, the area shall be reseeded by the applicant or agent thereof until successful germination occurs.

5. The following Monitoring Measures shall be implemented with regards to the EcoGrove Wind Energy Project :

a. A qualified biologist with experience with the affected species (upland sandpiper) shall conduct a thorough population survey of the affected species within the entire project EcoGrove Wind Energy Project area (deemed as the entire area within the circumference of the outer-most turbines) in Years 2 and Years 5 after “final completion” of the EcoGrove Wind Energy Project – for this Authorization, “final completion” shall be defined as the first day the entire EcoGrove Wind Energy Project begins producing electricity on the open-market. These surveys shall be conducted during the avian breeding season of: April 15 and August 1, otherwise they will not be considered valid. The purpose of these surveys would be to gain a better understanding of the behavior and sensitivity of grassland birds (i.e. upland sandpiper) to operating wind turbines. The final results of these survey shall be provided to the IDNR (Attn: Joseph Kath) within 60 days of completion.

b. Routine observation of species and reporting of road kills to the IDNR (Attn: Joseph Kath) by Acciona or construction staff in conjunction with their normal duties shall be implemented during the entire construction phase of the EcoGrove Wind Energy Project. The IDNR shall be notified of any upland sandpiper observations or road kills in the project area within 48 hours of discovery.

6. The following Party Responsibilities shall be in effect with regards to the EcoGrove Wind Energy Project, in Stephenson County, Illinois.

EcoGrove Wind LLC will be responsible for overseeing all minimization, monitoring and mitigation efforts identified within the Conservation Plan. EcoGrove Wind LLC will be responsible for planning, contract execution and construction supervision for the entire project.

7. The effective period of this authorization may be altered by mutual agreement between EcoGrove Wind LLC and the Department.

8. This authorization may be revoked pursuant to Section 5.5 of the Act if the Department finds that EcoGrove Wind LLC has failed to comply with any of these terms and conditions or has been responsible for the take of any State Listed Species beyond that which is incidental to the construction of the EcoGrove Wind Energy Project, in Stephenson County, Illinois.

9. The EcoGrove Wind LLC official(s) identified below is/are authorized to execute this agreement. Execution by an official from any one of these organizations indicates acceptance of all terms and conditions described in this document.

For the IL. Department of Natural Resources:

For EcoGrove Wind LLC:

John D. Rogner  
John Rogner, Assistant Director

Peter Duprey  
Signature

Office of Resource Conservation

8/11/09

Peter Duprey, President + CEO

Date Signed

Please print name and official title

7/31/09

Date Signed