

# Illinois Department of Natural Resources

<http://dnr.state.il.us>

One Natural Resources Way • Springfield, Illinois 62702-1271

George H. Ryan, Governor • Brent Manning, Director

## Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (Act) (520 ILCS 10/5.5), authorization is hereby granted to the Illinois Environmental Protection Agency (hereinafter referred to as the Agency) for the incidental take of the state-endangered Illinois mud turtle (*Kinosternon flavescens*), and the state-threatened Illinois chorus frog (*Pseudacris streckeri illinoensis*), western hognose snake (*Heterodon nasicus*), regal fritillary (*Speyeria idalia*) and Hall's bulrush (*Scirpus hallii*) at the Lewis Landfill site<sup>1</sup> in Cass County, Illinois. The Illinois Department of Natural Resources (hereinafter referred to as the Department) has determined that this taking is incidental to the proper corrective actions at the Lewis Landfill, which has been identified by the Agency in 1999 as one of 33 most problematic landfills in the state.

### Procedural History

The Agency prepared a conservation plan as described by the Act. That plan and the Agency's request for incidental take of the Illinois mud turtle, Illinois chorus frog, western hognose snake and regal fritillary were received by the Department on December 12, 2002. Public notice of the Agency's request for authorization of incidental take was published in the Edwardsville Intelligencer on December 19, 2002 and in the Cass County Star-Gazette on December 19 and 26, 2002 and January 2, 2003. Public comments on the Agency's conservation plan were accepted through January 30, 2003. No comments were received from the public.

### Compliance with the Illinois Endangered Species Protection Act

The Act includes six criteria which must be satisfied for the authorization of incidental take of an endangered or threatened species. These criteria and the Department's determination for each 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 stated and apparent purpose of this proposed action is to perform corrective actions at the Lewis Landfill in accordance with Illinois environmental regulations. The Agency has identified the Lewis Landfill as one of 33 former landfill sites most in need of remedial action and has secured funding through the Illinois Fund for Infrastructure, Roads, Schools and Transit (Illinois

---

<sup>1</sup> The project site is further described as all that part of the southeast quarter of the southeast quarter of Section 35 in Township 18 North, Range 12 West of the Third Principal Meridian, lying west of the Chicago, Burlington and Quincy Railroad right-of-way; and all that part of the northeast quarter of the northeast quarter of Section 2 in Township 17 North, Range 12 West of the Third Principal Meridian, lying west of the Chicago, Burlington and Quincy Railroad right-of-way, all situated in Cass County, Illinois.

FIRST) for those actions. Actions required on the site include the addition of sand cover in areas now having very shallow or no cover over refuse deposited on the site. The addition of this cover, movement of equipment to place the cover, and provision of access to the site may result in the take of individuals of the species listed through burying or crushing. This taking is not the purpose of the Agency's activity, but is incidental to the carrying out of an otherwise lawful activity.

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

The agency plans to use a non-traditional landfill cap of native sand for this project. This will minimize the alteration of habitat characteristics on the site compared to the traditional clay soil used to cap landfills. The depth of sand added to portions of the site will be the minimum, thus minimizing the chance that any animals present in areas on which sand is deposited will be entombed. The sand will be obtained from a commercial source to avoid any possibility of reducing sand prairie habitat off-site. No sand fill will be added to areas identified as sensitive by the Department.

Movement of heavy equipment will be limited to defined corridors. This is intended to limit the area that will be traversed by equipment and avoid rutting and denuding over larger portions of the site.

The Agency will erect fencing around the site to reduce trespassing and off-road vehicle use, remove exposed refuse throughout the site, provide a legal survey and permanently mark the four corners of the site, repair and monitor three groundwater monitoring wells within the site and provide reports to the Department, remove invasive species as specified by the Department, seed disturbed areas with a seed mix recommended by the Department, and provide maintenance of the site (fence repair, erosion control, reseeding) into 2005.

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

The Agency has secured funding for corrective actions at the Lewis Landfill through the Illinois FIRST program. These funds are allocated for this project in the Agency's budget.

4. Based on the best available scientific data, the Department has determined that the taking will not reduce the likelihood of 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:

Surveys conducted by the Department have documented the presence of Illinois mud turtles and Illinois chorus frogs on the Lewis Landfill site. Mud turtles are primarily aquatic in the spring and fall, but spend much of their time on land in the summer. Chorus frogs move to shallow ponds to breed in the early spring, but spend most of the remainder of the year buried in sandy soils. There is some risk that mud turtles or chorus frogs will be crushed by equipment moving through portions of the site. Take of animals on the surface will be avoided by searching work areas in advance of heavy equipment. While it is not possible to search for buried individuals of these species, any take of such animals is likely to be minimal because the species are not known to occur in high densities and equipment will be limited to small portions of the site.

The regal fritillary is known to occur on the landfill site. These butterflies prefer sandy habitats in Illinois. Adults are active from approximately mid-June to mid-August. Females lay their eggs on or near host plants, commonly on or near violet species, in the summer or early fall. Overwintering of immature stages is on vegetation and in ground litter. Suitable habitat for regal fritillaries occurs throughout the landfill site and on other nearby parcels of land. Take of regal fritillaries could occur through burying host vegetation or immature life stages of the butterfly. The risk of take will be limited to those portions of the site to which cover material is added or which are traversed by equipment.

There are no existing records of the western hognose snake on the Lewis Landfill site. Habitat on the site is appropriate for the species and the snake does occur in the general region of the landfill. If western hognose snakes occur on the site, there is a small risk that individuals could be crushed by equipment. This risk will be minimized by examining work areas for the presence of snakes before heavy equipment enters the area.

Hall's bulrush occurs on the Lewis Landfill site in a small area just east of a ditch along part of the west boundary of the site. Work along this ditch could result in crushing of individual plants or shallow burying of plants or seeds. The potential take of Hall's bulrush will be limited by marking the area in which this plant occurs and avoiding construction activity in that area. Hall's bulrush seeds can persist for several years until soil moisture is adequate to trigger germination. This persistence in the seed bank should allow Hall's bulrush to continue to grow in this area even if minor surface disturbance occurs.

Any loss of individuals of these listed species is expected to be minimal because of the precautions being taken by the Agency. The removal or coverage of exposed debris, removal of exotic plant species and habitat restoration on the site should increase the likelihood that these species will persist in numbers equal to or exceeding current levels on the site.

5. Any measures required under Section 5.5 of the Illinois Endangered Species Protection Act [520 ILCS 10/5.5 - Section 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 the Agency's signature on this authorization indicates their commitment to performing those measures.

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:

Public notice of the Agency's request for authorization of incidental take was published in the Edwardsville Intelligencer on December 19, 2002 and in the Cass County Star-Gazette on December 19 and 26, 2002 and January 2, 2003. Public comments on the Agency's conservation plan were accepted by the Department until January 30, 2003.

### Authorization

It is the determination of the Department that the measures to be implemented by the Agency at the project site will adequately minimize and mitigate the anticipated taking of Illinois mud turtles, Illinois chorus frogs, western hognose snakes and regal fritillaries associated with corrective actions at the Lewis Landfill. Further, it is our opinion that the take authorized herein will not diminish the likelihood of the survival or recovery of the 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 - Section 1080.40(b)], this authorization is issued to the Illinois Environmental Protection Agency 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 five (5) years from the date of execution, unless terminated pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 - Section 1080.80).
2. The Agency shall install perimeter fencing around the Lewis Landfill site. The fencing shall be woven wire along Stock Lane and for 200 feet along the east and west boundaries extending south from Stock Lane. The remainder of the fencing shall be 4-foot high, 2-strand barbless high-tensile wire.
3. The Agency shall inventory, remove and properly dispose of exposed refuse throughout the site. This removal shall be done by hand.
4. The Agency shall conduct a legal survey of the site and install permanent above-ground boundary markers at the four corners of the property.
5. The Agency shall properly remove an abandoned privy from the site.
6. The Agency shall properly seal an abandoned dug well on the site.
7. The Agency shall repair and sample three on-site groundwater monitoring wells. Sample results will be provided to the Department for review and use in management planning.
8. The Agency shall remove invasive woody species as identified by the Department. Removal shall be by a combination of physical and chemical methods as approved by the Department.
9. The Agency shall seed disturbed areas with a native sand prairie mix of grass and forb species approved by the Department.
10. The Department shall identify and delineate the area occupied by Hall's bulrush and other sensitive areas on the Lewis Landfill site. The Agency shall avoid surface disturbance and other activities within these delineated areas.
11. The Agency shall provide site maintenance, including but not limited to fence repair, erosion control and reseeded of areas in which the first seeding is not effective, through June 30, 2005.
12. The Agency shall use native sand to cover those areas in which the existing soil cover of debris is not adequate with the objective of establishing a minimum of six inches of cover. No fill will be placed in areas identified as sensitive by the Department.
13. To the extent practicable within restrictions on available funds and availability of contractors, the Agency shall restrict on-site activities to those periods during which Illinois mud turtles and Illinois chorus frogs are not expected to be active above ground.
14. The Agency will make all persons working on the site aware of the potential presence of

listed species and the need to avoid take of those species whenever possible. Work areas shall be searched for listed species before each day's activities begin and any individuals of the Illinois mud turtle, Illinois chorus frog, western hognose snake or regal fritillary found in the work areas shall be relocated to nearby areas that will not be disturbed on that day. Any such relocations shall be reported to the Department within 2 working days.

15. The Agency shall establish temporary access corridors at the locations shown as permanent and temporary access routes on project drawings dated October 7, 2002 (sheet 3 of 4, Tree Removal and Access Road Plan). Movement of heavy vehicles shall be limited to these corridors. Vehicles shall be equipped with wide tires or other equipment designed to minimize rutting and soil compaction. Use of these corridors is subject to the provisions of Item 13 regarding relocation of listed species.

16. The effective period of this authorization may be altered by mutual agreement between the Agency and the Department.

17. This authorization may be revoked pursuant to Section 5.5 of the Illinois Endangered Species Protection Act (520 ILCS 10/5.5 - Section 1080.80) if the Department finds that the Agency has failed to comply with any of these terms and conditions or has been responsible for the taking of Illinois mud turtles, Illinois chorus frogs, western hognose snakes, regal fritillaries, or Hall's bulrush beyond that which is incidental to the corrective actions at the Lewis Landfill in Cass County, Illinois.

18. The officials identified below are authorized to execute this agreement. Execution of this agreement indicates acceptance by all parties of the terms and conditions as described in this document.

For the Illinois Department of  
Natural Resources

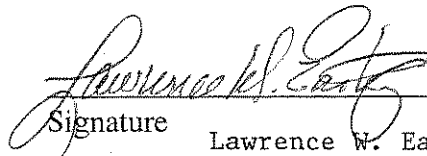
For the Illinois Environmental  
Protection Agency



\_\_\_\_\_  
Tim Hickmann, Acting Director  
Office of Resource Conservation

2/13/03

\_\_\_\_\_  
Date



\_\_\_\_\_  
Signature

Lawrence W. Eastep, P.E.  
Bureau of Land, Division of  
Remediation Management

Lawrence W. Eastep

\_\_\_\_\_  
Printed Name and Title

2/11/03

\_\_\_\_\_  
Date

