



Illinois Department of Natural Resources

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524 South Second Street, Springfield, Illinois 62707-1787

George H. Ryan, Governor • Brent Manning, Director

Authorization for Incidental Take and Implementing Agreement

Pursuant to the Illinois Endangered Species Protection Act (520 ILCS 10/5.5) your authorization for the incidental take of State threatened Illinois chorus frogs (*Pseudacris streckeri illinoensis*) at the Beardstown Dredge Cut is hereby granted, subject to the terms and conditions described below. This authorized take is incidental to the placement of dredged material at two behind-levee sites (identified as Sites 1 and 5 on the attached map - Attachment 1) and the removal of dredged material from those sites for beneficial off-site uses.

Procedural History

The Rock Island District of the U.S. Army Corps of Engineers (District) prepared a conservation plan as described by the Illinois Endangered Species Protection Act (520 ILCS 10/5.5). That plan and the District's request for authorization for incidental take of Illinois chorus frogs were received by the Department of Natural Resources (Department) on February 13, 2001. Public notice of the District's request for authorization of incidental take of Illinois chorus frogs was published in the Edwardsville Intelligencer on March 22, 2001, and in the Cass County Star Gazette on March 22, March 29 and April 5, 2001. Public comments on the District's conservation plan were accepted by the Department until May 7, 2001. All comments received by the Department were provided to the District for their consideration. The District and the Department met on May 29, 2001, to discuss the comments received and to review additional data on Illinois chorus frog use of the proposed dredged material placement site. Those data were collected by scientists from the Illinois Natural History Survey (Survey) working under contract with the Upper Midwest Environmental Sciences Center funded by the District. On June 7, 2001, Department staff met with the Survey scientists at the proposed dredged material placement site in order to better understand the findings of surveys conducted at the sites.

Compliance with the Endangered Species Protection Act

The Illinois Endangered Species Protection Act includes six 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 stated and apparent purpose of this proposed action is to maintain a 9-foot deep channel in the Illinois River for commercial navigation. The District has proposed to place dredged material on two sites downstream of the U.S. 67 bridge at Beardstown. This material would come from a portion of the Illinois River that receives sediment from the Sangamon River, which enters the Illinois River at Beardstown. Material would be placed landward of the levee on the left descending bank of the river at approximate River Mile 87.6-88.9 (Site 1), and 87.2-87.4 (Site 5). The District also intends to allow removal of dredged material from the site for beneficial off-site uses. In the course of these activities, it is anticipated that Illinois chorus frogs would be taken through burial or removal of dredged material. Such taking is not the purpose of the activities

proposed by the District, but is incidental to the carrying out of these activities. If this portion of the Illinois River is not dredged for commercial navigation purposes, shoaling would eventually occur and result in closure of the channel. Such an emergency situation would result in an unacceptable hazard to life and/or navigation as well as cause varying degrees of economic hardship. Placement of dredged material behind levees rather than along the river banks is preferred by natural resource agencies because of the reduced overall environmental effects. Continued long-term placement along the historically used river banks at this location, at current dredging volumes and frequencies, would most likely result in adverse impacts to both terrestrial and aquatic resources associated with the Illinois River basin.

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

Effects will be minimized to the maximum extent practicable by limiting placement of dredged material to a site of approximately 13 acres at Site 1 and 6.9 acres at Site 5. The area on which dredged material would be placed consists of Medway Silt Loam, a soil type that is finer grained than those soils believed to be most suitable for non-breeding use of Illinois chorus frogs. Adjacent privately-owned property includes sandy soils that are better suited for non-breeding use by frogs. Surveys conducted in 2001 indicate that frogs made little use of the proposed placement sites in the preceding non-breeding season. The District has proposed to mitigate the potential taking of Illinois chorus frogs by excavating ponds that will provide breeding habitat for the frogs. Breeding habitat is currently limited and unreliable (small ponds often dry out before Illinois chorus frogs can complete transformation) in the immediate vicinity. The construction of breeding ponds that annually hold water until transformation can be completed should increase recruitment of young frogs into the local population and is expected to adequately compensate for the loss of frogs that are taken by the District's activities. Placement of dredged material behind levees rather than along the river banks is preferred by natural resource agencies because of the reduced overall environmental effects.

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

The District's conservation plan includes a commitment to excavate ponds suitable for breeding by Illinois chorus frogs and to support monitoring of chorus frog numbers and habitat use at the site after the ponds are available for breeding. Funds to support these activities will be included in the annual operating budget for channel maintenance on the Illinois Waterway. However, federal agencies cannot make absolute commitments for funding on a multi-year basis because of their dependence on annual Congressional appropriations.

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:

The best data available to help determine the likely effects of the District's activities and to project the effectiveness of their mitigation measures are those collected on the subject site in 2001. First-year data indicate that the number of frogs that could be buried by the placement of

dredged material would be small. Field research in 2001 found 10-16 frogs that are likely to have overwintered in the existing dredged material pile at Site 1. That deposited material currently includes very low levels of organic material and consequently supports virtually no invertebrates that can be used as food by chorus frogs. In laboratory observations, Illinois chorus frogs showed a preference for the sandy soils in nearby agricultural fields over the fine to medium sands that make up the existing dredged material pile. The minimal use of the dredged material pile by Illinois chorus frogs also makes it unlikely that more than a few frogs would be taken as a result of the removal of sand from the pile for beneficial uses.

The excavation of ponds on the site should be adequate to compensate for any potential loss of frogs through these actions. These ponds will be excavated in a manner to make them suitable for breeding by Illinois chorus frogs and can be modified if they are found to be unsuitable, e.g., do not hold water long enough to allow successful transformation of tadpoles into frogs. Even a minimal increase in recruitment of chorus frogs as a result of the availability of additional breeding habitat would result in an overall increase in the number of frogs at the site. The area on which dredged material would be placed is not prime habitat for Illinois chorus frogs because of the relatively small particle size of the native soil.

Excavation of breeding ponds at Site 5 is not recommended because data collected in 2001 indicate that no breeding is currently occurring at this site and that few frogs use this site for non-breeding habitat. The excavation of breeding ponds at Site 5 would risk attracting Illinois chorus frogs to this site and increasing the likelihood of additional incidental taking.

During the public comment period for the District's conservation plan, concerns were raised regarding the possible presence of contaminants associated with the dredged material that would be placed on Sites 1 and 5. In response to those concerns, the District collected sediment samples from the Illinois River within the areas likely to be dredged. Those sediments were analyzed by a commercial laboratory and the results of the analysis were evaluated by the Illinois Environmental Protection Agency (IEPA). In a letter dated July 16, 2001, IEPA indicated that all river sediment samples were "clean." The concentrations of all substances were well within IEPA's "non-elevated" category for surface water sediments.

The incidental take of Illinois chorus frogs at these sites is not expected to reduce the likelihood of the survival of the species in Illinois because it is anticipated that the number of frogs at these sites can be increased by the proposed mitigation measures and no other site(s) of chorus frog occurrence will be affected by the District's proposed activities.

Habitat essential to the Illinois chorus frog's existence in Illinois would not be diminished because dredged material would be placed on an area of limited suitability for the species. Breeding habitat, often a limiting factor in the success of chorus frog survival, would be increased by the excavation of additional breeding ponds near Site 1.

5. Any measures required under paragraph (6) of subsection (b) of this Section will be performed:

Additional measures are listed below under "Terms and Conditions." This authorization is, by definition, subject to those terms and conditions and the District'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:

- a. Public notice was printed in the *Edwardsville Intelligencer* and the *Cass County Star Gazette*. Comments were received by mail and e-mail through May 7, 2001.

It is the conclusion of the Department that the measures that would be implemented by the District at these sites would adequately minimize and mitigate for the anticipated taking of a small number of frogs as the result of placement of dredged material and subsequent removal of dredged material for beneficial uses. Further, it is our opinion that the take authorized herein would not diminish the likelihood of the survival of the Illinois chorus frog 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.

- b. This authorization is issued subject to the following terms and conditions:

1. This authorization is effective upon signature by the Department and shall remain in effect for a period of 15 years unless terminated as described below.
2. The District shall excavate, or cause to be excavated, no fewer than two (2) ponds within the area indicated on Attachment 1 to serve as breeding habitat for Illinois chorus frogs. These ponds would be constructed according to specifications provided by the Department in consultation with herpetologists familiar with the life history requirements of the Illinois chorus frog. Those specifications are included with this authorization as Attachment 2 and are hereby made part of these terms and conditions. Upon acquisition of the property, pond excavation shall be completed as early as practicable to provide breeding habitat for the early spring. Land acquisition shall be in accordance with Federal regulations and is contingent upon sufficient funds being authorized and provided for this purpose. If the excavated ponds are found to be unsuitable for breeding by the Illinois chorus frog, the District shall modify the ponds based upon recommendations of the Department.
3. The District shall plant, or cause to be planted, native species of emergent and submergent aquatic vegetation in the excavated breeding ponds to provide substrate for Illinois chorus frog breeding activity. If the initial planting fails, the District shall make one additional attempt to establish native emergent aquatic vegetation in the excavated ponds.
4. The District shall perform, or cause to be performed, monitoring of Illinois chorus frog habitat use and breeding activity at the subject site for at least four (4) years, or through the 2005 Illinois chorus frog breeding season. The District shall provide a copy of the annual report for that year's data collection within 30 days of receipt of the final report from the Survey.
5. The District shall perform, or cause to be performed, annual spring surveys to determine the presence or absence of breeding Illinois chorus frogs at the subject site throughout the effective period of this authorization. The District shall provide the Department with a copy of these annual listening survey reports within 30 days after completion of that spring's final survey.

6. Removal of dredged material for beneficial uses shall be allowed. Movement of trucks, excavating equipment and other apparatus necessary for removal of dredged material shall be limited to the areas delineated on Attachment 1 in order to minimize the risk of taking of Illinois chorus frogs by crushing and to minimize the area in which soils may become compacted by vehicle traffic.
7. The effective period of this authorization may be extended by mutual agreement between the District and the Department.
8. This authorization may be terminated only by mutual agreement between the District and the Department. Early termination of the use of the subject site for dredged material placement shall not necessarily relieve the District of their obligations pursuant to this authorization.
9. This authorization may be revoked by the Department if the Department finds that the District has failed to comply with any of these terms and conditions or has been responsible for the take of Illinois chorus frogs beyond that which is incidental to the placement of dredged material or removal of dredged material for beneficial uses.
10. The District Official identified below is authorized to execute this agreement. Execution by the District Official indicates acceptance of all terms and conditions described in this agreement.

For the IL. Department of Natural Resources

For the U.S. Army Corps of Engineers
Rock Island, IL. District



Kirby Cottrell, Director
Office of Resource Conservation



William J. Bayles
Colonel, U.S. Army District Engineer

- Include date signed

- Include date signed

** Received by USACOE on 10/11/01 → This is the start of the 15 year time period.*

